THE HORTICULTURIST
EDITED BY
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E. SEARS & CO.

Vol. 25. MARCH, 1870. No. 285.

Hints and Helps to Cottage Gardening; or, What shall we Plant in our Garden this Spring?

BY THE EDITOR.

A Select List of Garden Vegetables.

THE revival of spring work brings its pleasures as well as its anxieties, and perhaps the few moments of anticipation of garden produce for the coming year help to fill out the budget of pleasure every farmer's and gardener's family is bound to enjoy. No one can mistake the fact that the *character* of our lists of vegetables is steadily advancing, old varieties drop out of the lists, and new and improved ones take their place. And gardening now is necessarily a course of labor, giving both a greater product than ever before; but also an immense gain in *quality*, the very point of all which should interest a family most.

For the convenience of our readers who love gardening and desire their tables to be well spread with the choicest of vegetables from their own garden, we have conferred with our principal seedsmen here, in this city, and have selected a choice list of the very best varieties under each class. Many of them we have personally tried, and it is believed none will regret the adoption of the list as it is, entire, for their own use.

BEANS.

Bush, Early Valentine, Mohawk, Refugee, White Marrowfat.—The last is best adapted to field culture, the third is the most productive, the second is best adapted to northern latitudes, and the first is best for family use.

POLE BEANS.

Lima, London Horticultural, Giant Wax Beans.—The last is a new variety, very productive and of a delicious flavor.

ASPARAGUS.

Conover's Colossal.—A really excellent variety; grows very large, should be planted in hills three to four feet apart. Is very productive.

BEETS.

Early Flat Bassano, Early Blood Turnip, Dark Red Egyptian.—The first is the earliest we have, coming into maturity a week or ten days sooner than any other sort. The second is an old standard variety, is very good for early use, very tender, and is indispensable to every garden, however small. The *Dark Red Egyptian* is a very fine new variety from Egypt, very deep red, tender and delicious.

CAULIFLOWER.

Early Erfurt, Half Early Paris, Le Normand.—All are excellent. The first quite small, but tender; the last of immense size, and very superior.

CABBAGE.

Early Wyman, Early Wakefield, Early York, Early Winningstedt, Early Flat Dutch, Late Bergen Drumhead, Late Drumhead Savoy, Late Red Dutch, Late Marblehead, Mammoth.—The *first* is a new variety, very early and profitable, large size and excellent quality. The *second* has always been known for its excellent flavor, and is considered *the standard* early variety for a market crop near New York. The *Red Dutch* is best for pickling, and the *last* is the largest kind grown, heads often weighing from twenty-five to fifty pounds. For a late winter variety, for market, nothing as yet is so well liked by gardeners as the Premium Flat Dutch.

CARROTS.

Bliss Improved Long Orange.—A new variety, a great improvement on the old standard long orange, being larger, better flavored and deeper color.

Large White Belgian—grows to a large size, and is much liked for soups and seasonings.

CELERY.

Incomparable Dwarf, Boston Market, Dixon's Mammoth White, White Solid.—The *first* of a very dwarf habit, exceedingly solid, and fine crimson color; the *second* very fine and particularly popular among Boston growers, for its tender, crisp and succulent stems; the *last* very desirable for its large size, and crisp, fine flavor.

CUCUMBERS.

Early Russian, Early White Spine, Long Green Prickly.—The *first* is the earliest in cultivation, but short; the *second*, best for market or pickling; the *last*, for family use, being the firmest and best flavored, makes a beautiful pickle.

CORN.

Farmers' Club Sweet Corn.—A new variety, very sweet, tender, and splendid flavor; ripens early.

Trimble's Sugar Corn.—Also a new variety, very fine quality, for late purposes.

Crosby's Extra Early Sugar.—Ears are very short, but contain fifteen to sixteen rows, rich sugary flavor, very early and very productive.

EGG PLANT.

Pekin New Black, New York Purple.—The first is a new variety from China, a very handsome grower, grows to the height of two to three feet, with dark bronzy, purple foliage, very ornamental foliage; the last is a valuable market variety of deep color and large size.

LETTUCE.

Large India, Early Curled Simpson.—The first a very large variety, forms large, round heads, which cut white, brittle, and almost transparent; the second, an excellent sort for forcing, is very early and largely grown in the neighborhood of New York.

MUSK MELONS—SKILLMAN'S FINE NETTED.

Green Citron, White Japan, Pine Apple.—The first is small but very sweet, and the second is even more delicious; color of fruit, creamy white, and flesh thick.

WATER MELONS.

Mountain Sweet, Mountain Sprout, Black Spanish.—The first is best for general culture, best; flesh scarlet color, solid, very sweet and delicious; the second quite long, also one of the the last, round, and smaller than either of the others, but thin rind and rich sugary flavor.

NEW VARIETIES.

The *Alton Large Nutmeg* melon, round, from six to nine inches in diameter; flesh fine grained, juicy and red, with somewhat of a musky flavor. Is variable also in quality, according to soil and season; a good, profitable shipping melon.

The Long Persian, introduced by Bayard Taylor, a great acquisition to our Middle and Southern States; flesh crimson, and remarkably fine texture, delicious flavor, thin rind, hardly half an inch; large size and globular in form; best for family use.

Russian American, also of very sweet flavor, and delicious crispness of flesh, but of *tremendous size.*

ONIONS.

Yellow Danvers, Wethersfield Large Red, White Portugal.—The first, early and best for garden use; the second *very large* and good for marketing.

PARSNIPS.

Sutton Student, Long Smooth.—The first, a new variety of delicious flavor; the second, roots very long, white, smooth, free from side shoots, tender, sugary, and most excellently flavored.

PEAS.

Landreth's Extra Early, McLean's Little Gem, McLean's Advancer, Laxton's Prolific Early Long Pod, Champion of England, Large White Marrowfat.—The first we have no hesitation in saying, from experience, is the *best early pea* for garden use, being very early, productive, and excellent quality. We have discarded the Early Dan O'Rourke. McLean's Little Gem is a great curiosity, growing very dwarf, but of excellent flavor. The *Advancer* is very prolific. The fourth is very valuable as a second early pea, very hardy and fine quality. The last two are already well known. Few or none can surpass the *Champion of England* in desirability for family use.

PEPPERS.

Bull Nose or Bell, Cayenne.

POTATOES.

Early Rose, Excelsior, Bresee's Prolific, Climax, Mercer, Peach Blow, Jackson White.—The second is the finest flavored of all we have ever tasted, the *first* most productive and best adapted to general cultivation of all the new varieties; the third and fourth very desirable for trial; the last two, old and well known kinds for market, of the finest flavor.

RADISHES.

Long Scarlet, Short Top, Scarlet Turnip Radish.

RHUBARB.

Downing's Colossal, Myatt's Linnæus.—The first truly superb; the second tender and very fine.

SQUASHES.

Yellow and White Bush Scolloped, Summer Crook Neck, Boston Marrow, Hubbard.

WINTER VARIETIES.

Hubbard, Yokohoma.—Every family should have them all. The Hubbard is the best table squash yet known.

SWEET POTATOES.

Nansemond.

TOMATOES.

Early Smooth Round Red, Cook's Favorite, Gen. Grant, Tilden.—The first is universally admitted to be of excellent standard reputation. The Gen. Grant has been well tested the past year, sufficiently so to merit recommendation, being very productive and very fine flavor. Of the newer and later varieties the most noticeable are The Trophy, Rising Sun, Crimson Cluster and Charter Oak.

TURNIPS.

Yellow Globe, Cow Horn, Purple Top, Ruta Baga, Yellow Stone, Strap Leaved Red Top.—The first is best for a general crop either for table use or stock. The last very fine grained flesh and exceedingly rich.

In laying out the garden, work will be greatly simplified if the rows are placed sufficiently distant from each other to permit a horse and cultivator to pass up and down, the hoeing being done by hand between the hills of each row. To succeed well with all garden operations, a *system* is necessary which shall provide the simplest as well as most thorough means of cultivation, while the surest *bank* to draw a *discount* from, for future repayment, is a good big bank of well rotted manure.

Popular Pears---The Seckel.

SO old and so well known a variety of the pear as this might not need, at this late day, any description of its excellencies. Everywhere popular; seeming to succeed in nearly all localities, and never failing when once in bearing, it may be considered, in one sense, our very "*Patriarch*" of pears.

We do not believe one grower in a hundred knows its history, and although pomologists cannot closely trace it to its original source, yet Mr. Downing gives us the only authentic information as to its memory.

"About eighty years ago, when the late venerable Bishop White was a lad, there was a well-known sportsman and cattle dealer in Philadelphia, who was familiarly known as '*Dutch Jacob.*' Every season, early in the autumn, on returning from his shooting excursions, Dutch Jacob regaled his neighbors with pears of an unusually delicious flavor, the secret of whose place of growth, however, he would never satisfy their curiosity by divulging. At length the Holland Land Company, owning a considerable tract south of the city, disposed of it in parcels, and Dutch Jacob then secured the ground on which his favorite pear tree stood, a fine strip of land near the Delaware. Not long afterwards it became the farm of Mr. Seckel, who introduced this remarkable fruit to public notice, and it received his name. Afterwards the property was added to the vast estate of the late Stephen Girard. The original tree still exists, vigorous and fruitful.

"It is supposed that the tree originated from seeds dropped by Germans who emigrated from Germany and settled near Philadelphia, as it bears some affinity to the Rousselet, a well-known German pear."

The Seckel pear is small in size, but of regular form, and has a peculiarity of growing in clusters at the ends of the branches, each cluster holding from two to five pears, but usually three. A well laden tree is often a great curiosity, as every available spot of surface seems to bear a cluster.

The fruit at first is but slightly colored, of a brownish green, but gradually changes into a more yellow brown, and finally puts on a lively russet-red cheek and a few small gray dots.

The *stem* is about a half-inch long, moderately stout, inserted in a small narrow cavity, highest on one side. *Calyx*, small, open, with short, stiff, incurved segments. *Basin*, shallow; *core*, small; *seeds*, broad, ovate.

The fruit is unsurpassed in flavor, and at various Pomological Conventions, in England and America, it has been declared the most exquisitely flavored of any variety known on both continents. The flesh in texture is yellowish white, juicy, very sugary, melting, spicy and aromatic.

When we add to this that it is one of the healthiest and hardiest growers of all pear trees we possess, forming a fine, compact, symmetrical head, and well adapted to culture either as a dwarf or as a standard, and on both equally certain, we have a variety of inestimable value in our horticultural collections.

Cultivators should take due notice that it is *late in coming into bearing.* We have seen large trees which did not commence bearing until their tenth year, but when once in productive condition, its luxuriance is fairly astonishing.

It will bear more manure than any other variety we know, and, in fact, demands it constantly in order to give large and handsome fruit.

The illustration herewith introduced (to which our artist has done ample justice) is, we believe, the only life size one ever given in any journal in this country.

Cost of Growing an Acre of Early Cabbages.

AT the January meeting of the Alton Horticultural Society, O. L. Barler read an essay upon the subject—"*Counting the Cost.*" The object was to show that it was the part of wise men, intending to enter upon any great work (agriculturally for example), to count the cost whether he be able to prosecute it successfully.

That all men were not thus wise is the plainest of all truths. The biggest blunders that men ever made have been perpetrated in our profession.

The Seckel Pear.

It is erroneously thought that men of the least understanding and incapable of any other business, can turn a furrow and grow crops. But of all deceitful notions this is the most false and misleading.

It was argued that failure was most frequently occasioned by not comprehending the situation and providing for the necessities of the case. Men attempting to grow vegetables do not count the cost.

By way of illustration, the following estimate was made of the cost of growing an acre of early cabbages:

First, we select for the cabbage patch the richest spot of ground in the garden.

The preparation for the crop should commence in the Fall by hauling on

Fifty tons fresh stable manure, at $2.....	$100 00	Mark out in rows, both ways.....	2 00
One deep plowing in the Fall, turning the manure under.....	4 00	Ten thousand plants grown in hot bed, and transplanted—A No. 1 plants in all respects—1½c. each	$150 00
In the Winter give a dressing of ten loads of wood ashes.....	15 00	Setting the plants.....	10 00
In the Spring, plow again, turning up the manure and mixing all thoroughly.....	4 00	Cultivating and hoeing 6 times.....	15 00
Now, sow broad cast, ¼ ton raw bone superphosphate	25 00	Dusting with one bbl. plaster during growing season—cost of plaster.....	3 00
Harrow, roll, and pulverize most thoroughly,	3 00		$331 00

Our one acre of cabbages has now cost us $331.

When we come to market with the crop in Chicago, we must deduct fully *one-third* from the gross receipts for expenses in packages, freights and commissions.

Then deduct still further an amount sufficient to pay for three weeks labor in gathering and shipping the cabbages—what remains is your *profit!*

"What," you say, "must we spend $300 and upwards on an acre in the garden, and that too upon so gross and mean a thing as a cabbage?"

Some men don't believe that it costs so much. It has surely not cost them anything like that amount. And then the expense of harvesting their crop was especially light, and the profits lightest of all!

Our statement is moderately made.

If we should adopt the true Henderson style of gardening, our estimate will be found entirely too low! That prince of New York gardeners puts $600 down as the cost of growing an acre of vegetables in his country!

These statements seem extravagant, because men are not in the habit of counting the cost of anything that they produce.

How singular it is that men do not in agriculture, as in other callings, "first count the cost," and in view of the force and capital to be employed weigh the probabilities of success or failure.

All know that to be a lawyer, or doctor, or preacher, or even a stump speaker, they must have some education and fitness for their specific work.

But to be a "tiller of the soil" it is thought that education, or "smartness," so called, is even damaging. Nothing but *big hands* and bigger feet are essential to him, and as for "book larnin'"—away with it—you cant teach me!

Such men never respect their calling, and certainly they do not honor it.

The Currant Worm.

CAN any one inform me whether there is any power in the raspberry to prevent the ravages of this pest? I have somewhere heard or read that the worm will not attack a currant bush if a raspberry plant is growing in its immediate vicinity. I have noticed but a single fact apparently bearing upon the question. Last summer my currants were overrun with the nuisance; but one bush in the row was entirely exempt. This one had three or four Brinckle's Orange raspberry shoots growing up in the midst of it. Whether these would account for its exemption is a very interesting question which I have no sufficient knowledge to answer; but I could discover no other reason. Will some one give us further light upon the matter? W. H. W.

Popular Cherries.

The Early Purple Guigne.

LIKE many other valuable varieties of fruit that have been introduced into America from foreign countries, and become successfully acclimated, we are indebted to Europe for that popular cherry, the *Early Purple Guigne.* To what part of Europe we can give it credit, it is impossible to ascertain. By our eastern horticulturists it was imported from England, while in the West it was introduced by a party of German emigrants from Germany.

But it has become, in both sections of the country, very valuable, on account of its many desirable qualities. The tree is quite hardy, a rapid grower, but sometimes with loose and irregular branches; the shoots are of a dark brown color, with small leaves drooping from the petioles. *Stem*, long and slender; *size*, medium to large; *form*, roundish, heart shaped; *color*, before ripe, dark red, but when fully ripe, a rich, dark, purplish black; *flesh*, dark purplish red; juicy, with rich, sweet, excellent flavor.

It is a very early variety, perhaps the earliest of all the sweet cherries, ripening usually in the month of May. It is a good bearer, although rather shy when young; but as they acquire age become very productive, and also very hardy. May be considered indispensable in every collection, whether for garden or field use.

The Barnes Mammoth Strawberry.

BY THE EDITOR.

FOR several years past a variety of strawberry, with the above name, has been sold in New York to a limited extent, which has attracted the attention of dealers and consumers on account of its large size, firmness and excellent *carrying* as well as *keeping* qualities, and wherever sold have uniformly commanded prices double those of the Wilson, although marketed at the same time.

The conviction has become a general one, that the reason for the great unprofitableness of strawberry culture, in late years, has been too close an attention to the Wilson, as well as too great a rush into the business. Cultivators tell us that the Wilson, although the most reliable of all kinds of strawberries to cultivate in all parts of the country, is still an unsatisfactory one in very many respects. It is called the *poor man's berry*, because it will succeed without a great deal of attention; but when grown for market its produce is very unreliable. The first year it may be only one thousand quarts per acre, nearly all large berries, and the second year, its best year, there may be only two thousand or three thousand; but afterwards it fails to produce a fair crop, its berries are small and is hardly worthy of attention. To keep, then, a bed of the Wilson in prime order, requires heavy manuring, good cultivation and renewing every two years. Such a course is costly, and when we remember that the *Wilson is always the lowest priced strawberry in the market*, it becomes a candid question whether strawberry culture would not be more steadily remunerative if some other variety could be found, producing more large choice berries, equally as firm, and equally good in quality, but the roots or beds of which would last twice as long without renewing. Horticulturists are watching for such a variety, but no substitute can yet be found. The nearest substitute we have seen yet, for localities *where it will grow*, is the *Barnes Mammoth*.

We have the variety growing on light sandy soil, and it is very fine, but we have been corresponding with other cultivators to learn their experience, and from one cultivator at Middletown Point. N. J.. we received this letter.

1st. "*Barnes Mammoth*" does *best* on sandy loam, better on heavy land than light, but under any circumstances have the ground *good, rich.*

2d. It will not yield *as many berries* as the Wilson, but will produce *more large berries* than any other variety we know of.

The Wilson has the characteristic of giving a few of the first pickings that might pass for large, but they soon fall away into little trashy stuff.

3d. We find the second year it will produce as large berries and as many of them as the Wilson. This is one of its marked features, provided the ground be kept clean and free from *weeds.*

4th. We believe it will do better on the *hill system* than any other.

5th. It is about as early as the Wilson.

Its uniformly large size, beauty of shape and color, very good flavor, and the best bearer of the large berries, make it a very desirable variety. It is a very vigorous grower, stooling immensely.

We have sold as high as $800 from an acre of Barnes, grown on the *row system*, and still neglected, and from that down to $250 per acre.

The *Barnes* has always brought a much higher price than any of the common sorts, and during the last season commenced at twenty-five cents per pint, and did not fall below ten cents per pint, when the berries came in good order.

We also received another letter from a correspondent on the Hudson River, who enjoys the advantage of a *good heavy* soil. So, from both these accounts, we are able to judge that the Barnes succeeds well on both light and heavy lands.

"The Barnes Mammoth Strawberry, as far as my experience has gone, I consider is the best strawberry for *market cultivation.* It is a very abundant bearer, is not particular as to soil, produces large berries, very large indeed, and more in proportion to small ones than any variety I know of. Does not by any manner of means exhaust itself the first year, or the second, but will continue in bearing longer than the Wilson, and produce more *pounds of fruit;* the berries averaging a third larger, and bringing a correspondingly higher price

in the market. I should have no hesitation in recommending it for market cultivation. It will undoubtedly thrive better on a strong soil than on a light one, as is true of all varieties that produce abundant crops of large berries; but I think it will do equally well as the Wilson on a sandy soil."

We are anxious to have strawberry culture brought up to a *higher standard.* As long as the mass of cultivators are content with shiftless culture, and such indifferent berries as the Wilson usually averages, we can never expect anything but glut after glut, and disaster after disaster. We sincerely believe in originating new varieties, and seeing them well tested, for even if there is but one in a hundred that proves of decided merit, there is a real gain somewhere. *We must have a better berry than the Wilson for profitable market cultivation.*

A New Cherry.

BY HENRY T. HARRIS.

WE have here, in this part of Kentucky, a new cherry—at least I have never seen it elsewhere, or read of one like it. It is of a very decided Morello type. The tree is almost a semi-dwarf; or, rather, not a full standard, growing bushy, stocky, and with the branches not so pendant and *willowy* as the common old red Morello. The fruit is a clear, transparent, dark pink; the skin and pulp almost opaque, and begins to ripen, in this latitude, about the first days of June; and the crop is fully gathered before the old Morello red is fairly blushing. It is exceedingly juicy, tart and pleasant when fully ripe, but is much too acid to eat from the tree. As preserves, and for tarts, however, it has no equal in the cherry kingdom. The wood and bark of the tree partake strongly of the old Morello (of which I doubt not it is a chance seedling), but are, in some respects, similar to both the Duke and Bigareau families. Both tree and fruit are exceedingly hardy, and enormously prolific—rarely failing to mature a full crop even when *all* other varieties fail. I have known this cherry about twelve years, and have never known it to fully fail. The tree is a rapid and handsome grower, and begins to bear very young. It reproduces itself (but not so abundantly from the roots or suckers) like the common Morello. I have gathered from a quart to a gallon of fruit from trees five years old from the sprout. The leaves are somewhat broader than the common Morello, and not so dark. I have seen trees, eight years old from the sucker, so literally covered with fruit that, at a little distance, they had the appearance of being covered over with a pinkish scarlet cloth. The blossoms are some larger than its "mother cherry." It is familiarly called here the "Dyehouse," in honor of the old gentleman upon whose farm the first tree was discovered. That tree is still standing; now over a quarter of a century old, and still bears fine crops, and has never been known to fail but twice. This new fruit has been but little disseminated; not, perhaps, in a half dozen counties outside of this (Lincoln) county. Mr. Dyehouse lives in the southern part of our county, in the hills near Hall's Gap. I have about fifty trees growing on my place, planted seven or eight years since, which were dug from under the trees of Mr. Dyehouse. Fruit raising, with us, until within the last few years, has been shamefully neglected, and this accounts for the non-dissemination of this truly desirable fruit. Such is its excellence, that no other cherry will be preserved where this can be had. After all, may we not be mistaken as to this matter, and it prove to be what is familiarly known as the "May Cherry?" Be this as it may, I have never known it elsewhere, nor can I find any description of it in any of our books on fruits—Barry, Downing, Thomas, etc.

I have been equally at a loss to find any of our intelligent nurserymen or horticulturists, in our own or other States, who know anything of this cherry. I send you a small quantity of the wood and bark, and perhaps you can form some idea of its true type from them. The fruit is not suited to long transportation, being very tender when ripe enough for use. For near market, however, it can be used, and will give satisfaction to all who like a cherry preserve (and who does not?). I shall send specimens to some of our near horticulturists next season, with a view to obtaining light upon this unsettled question of identity. I would remark that I have no trees for *sale*, nor do I ever *expect* to have, but would send a limited number, *gratis*, to a few who really desire to try it, and who would be willing to send something to me from their grounds in exchange. STANFORD, KY.

Design for Village or Country House with Home Conservatory.

FREQUENT inquiries are made of us for plans of small green-houses and conservatories, to be connected with the main dwelling, and heated from the same heating apparatus as the interior rooms are warmed. This design will give a partial idea how to accomplish the object.

By reference to plan, A is the portico; H, the front hall, 7 by 16 feet; B, the parlor, 14 by 16 feet; G, the conservatory, 14 by 18 feet, opening out of the parlor and fitted up with shelves at the sides, with a stand in the centre, and a passage-way of three feet in width all around it.

At the further extremity of the front hall a glazed door opens into the back entry. This hall opens out upon a back porch, I, 6 feet wide, and into the parlor and kitchen, D, which is 12 by 18 feet. The dining-room, C, 14 feet square, also connects with the kitchen by means of a small passage fitted up with shelves. On the right of the chimney is a good sized china closet. Opening out of the kitchen is a pantry, E, 6 by 8 feet, with sink, pump, cupboard, etc. This pantry opens out upon a platform at the rear of the house.

The second floor of the house contains two front chambers, each 14 feet square; a kitchen chamber, 12 by 14 feet; another chamber over the pantry and entry, 9 feet square; and a small room over the dairy.

The best method of heating such a home conservatory is as follows: A furnace made of a common air-tight stove is placed in a brick air-chamber underneath the floor, the heat passing up through a single pipe running from the *top* of the chamber to the floor above—while from the floor at the farther end of the conservatory, near the door, another pipe extends downwards, and terminates in the *bottom* of the air-chamber, thus producing a thorough circulation of air all the time, with a regulated supply of fresh air from out of doors, conducted by means of a box, like a common furnace box, to the chamber. The six upper sashes of the roof have pulleys and cords, by which they may be lowered or raised at pleasure.

A good country carpenter can erect such a green-house at less than $250, and it cannot fail to be a most agreeable addition to the home necessities and pleasures of the inmates.

Grape Notes from the Parsonage.

THE year 1869 was, on the whole, a very favorable one for the grape crop in New England. It is true the spring was very cold and backward, and the early summer unusually wet. But we had such a magnificent autumn, so warm, so protracted, that nearly every variety of grape had an opportunity to show whatever excellence there is in it.

As there is always much interest to learn any facts that experience may have given, especially in regard to the newer and less tested kinds, I propose to say a few words concerning the behavior of several of these during the past season.

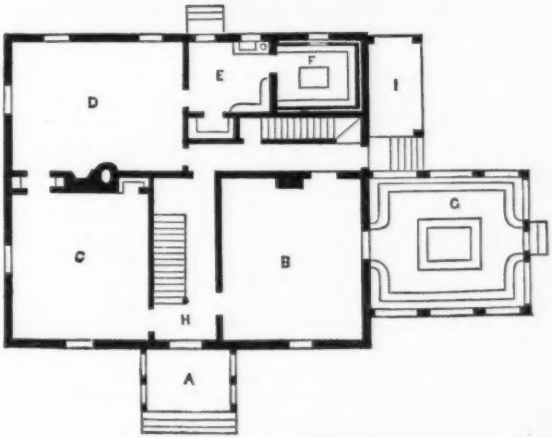
1. *Othello.*—This is No. 1 of Arnold's hybrids. It was removed in the fall of '60 from the place where it had previously stood, so as to allow it more room. There was, consequently, no fruit. The vine is a healthy, vigorous (but not rampant) grower, and wood *very* hard and compact. It was entirely healthy the whole season through.

2. *Cornucopia* (Arnold's hybrid No. 2).—A strong and healthy vine, showing unusual vigor. It ought to have borne several bunches of fruit, but did not show a grape. It fruited slightly the previous year, but the birds paid it the emphatic compliment of devouring every berry before I could get a taste, while magnificent Delawares hung untouched by its side.

3. *Autuchon* (Arnold's No. 5).—This, too, was transplanted in '68, to give it room enough to show its admirable qualities, for it is a very fine, delicate, high-flavored, white grape. It, of course, bore no fruit the past season. The vine is a good grower, very short-jointed, and thus far entirely exempt from every appearance of disease.

4. *Brant* (Arnold's No. 8).—This is said to be a remarkably early variety, and I should so conclude from the early ripening of the wood. Planted the previous fall, it has made a strong cane of six or seven feet, which promises to give me next season a taste of its fruit. It showed some *slight* traces of mildew, but not enough to do any perceptible harm.

Design for Village or Country House with Home Conservatory.



Ground Plan.

5. *Canada* (Arnold's No. 16).—Set in its present position last spring. It has grown tolerably (about three feet), but has been entirely healthy. I very much regret having been obliged to transplant these promising varieties; but they soon showed such vigor of growth that their first position was seen to be entirely unfit for them. Next year I hope to be able to speak of their fruit grown in my own garden.

6. *Eumelan.*—As I have already reported upon this exceedingly promising grape (HORTICULTURIST, Vol. 24, page 355), I will add but a few words here. It has, during two years, grown as vigorously as any one could wish, while yet its internodes have averaged not more than four inches in length. It has been as free from disease as the trellis on which it grew. And its fruit, earlier than either Hartford or Miles, is very nearly equal to Iona. One of the clusters which it bore last season (vine planted in spring of '68) was *very nearly* as large as the cut published by its introducers. It is decidedly the best black grape yet offered for sale.

7. *Diana Hamburg.*—I have given this variety the warmest spot in the garden, good, rich soil, and careful attention; but it is most shamefully ungrateful. The most that I have yet been able to induce it to do is to stand still without dying. But whether it won't "shuffle off this mortal coil" during the winter (as its predecessor did), remains to be seen. The fruit is said to be superb; but the question is—How to get it?

8. *Weehawken.*—Almost the same remarks will apply to this as to the preceding. I have not been able to do anything with it. It won't grow. Though planted in a good, warm and sheltered position, and in good soil, it did not lift its head an inch during the whole season. And it was just so the year before with another plant of the same variety.

9. *Hine.*—This has grown well in circumstances where it might certainly have been excused if it had refused to grow at all. It was unintentionally neglected. It has been free from all disease, and made such a strong growth as justifies the hope of a little fruit next fall. I am much pleased with the appearance and behavior of the vine, and hope to find the fruit as early and as excellent as has been represented.

10. *Croton.*—This and the next are hybrids, raised by Mr. Stephen W. Underhill, of Croton Point, N. Y. They have attracted a great deal of attention wherever shown; and they are most richly worthy of it. The Croton is a white grape, ripening (according to Mr. U.) with the Hartford. The berry is about the size of Rebecca, and bunch from six to eight inches long. It is of the very highest excellence, having a thin skin, no perceptible pulp, and a most refreshing, winey juice. Its quality approaches nearer to the tender delicacy of the foreign grapes than any other hardy variety I have ever tasted. The vine during the past season proved with me entirely healthy, making a fair but not vigorous growth of hard and *very* short-jointed wood. I have not yet fruited it, but its originator says that it blossoms later and requires less time for maturing than any other variety with which he is acquainted. If it shall prove hardy and healthy, and the fruit ripens as early as Hartford, it must almost entirely supersede every other white grape. Indeed, if the Croton and Senasqua can be successfully grown out doors, there will be little occasion for building any more cold graperies.

11. *Senasqua.*—This is a black grape—a hybrid between Concord and Black Prince. Berries about the size of Concord; bunch of medium size. The author of the article on native grapes, in the *Horticultural Annual* for this year, says: "*We regard this as the finest hardy grape we have yet tasted.*" I should fully agree with him, unless another of Mr. U.'s hybrids (not yet named), should be excepted. It leaves almost nothing to be desired. It has a thin and delicate skin and very meaty flesh, the two firmly adhering when fully ripe, as in the Black Hamburgh. You can break open a berry, as you can a peach or plum, and expose the seeds, without separating the skin from the flesh. Almost every one would say, on eating it, that it was a foreign grape. My vine was planted in common garden soil last May. It has grown vigorously, forming a stout cane about seven feet high. The leaf is thick, tough and healthy, with no indications whatever of foreign blood. My brief acquaintance with the Senasqua leads me to the belief that it is the most successful approach that has yet been made to combining in one plant the superior quality of the foreign fruit and the healthiness and hardiness of the native vine.

12. *Salem.*—This vine stands in a very favorable position for early ripening, in light, dry soil, a few feet south of a high tight fence; and yet its fruit was the last to mature in

the whole garden. Diana, Rebecca, Iona, Union Village (though not one of them, except Iona, in as favorable a situation), all ripened before it. The vine is a strong one, with three or four canes as large as a good large lead pencil, and ought to have borne some pounds of fruit. In reality it bore only four small bunches, which, altogether, would not weigh more than half a pound. I don't know what to think of it. The vine is true to name, for it came direct from Mr. Rogers. But if this is a specimen of its future behavior, "its room is better than its company." The fruit was fair, but not nearly so good as Wilder, growing at its side, or Massasoit or Agawam.

But my article is getting too long, and I will close with a few words in regard to one other variety.

13. *Miles.*—This is a strong and healthy grower, but the fruit is so small and so inferior that I do not consider it worth raising. It *colors* quite early, but does not *ripen* as early as Eumelan or Hartford. Nor is it a prolific bearer. In a word, I have concluded that the best use I can make of it is as a stock into which to graft some other desirable kind.

READING, MASS. W. H. W.

A Letter from Shirley Hibberd.

STOKE NEWINGTON, LONDON, *January* 18, 1870.

EDITOR HORTICULTURIST: Your invitation affords me an opportunity of returning thanks, better than I could do by letter, for many kindnesses and courtesies bestowed upon me by compatriots of yours. I call to mind now, with intense pleasure, the many occasions on which plants, and seeds, and friendly letters have been forwarded to me from friends (who call themselves friends, and to whom I send hearty greetings as from one who values friendship) on your side of the Atlantic. If we can be brothers all, let us be so.

"Wherever British hymns are sung,
There is the Britain's fatherland."

As thousands of our needy emigrants might say as they land upon your fruitful shores. I have but one difficulty in responding to your invitation, and that is, to divine what I should say that may be interesting and profitable on your side. Perhaps a word about the weather may not be amiss; we are never tired of talking about it, perhaps for the simple reason that it varies so frequently that we never know what the next hour may bring forth. At this moment the barometer stands at 30¾, and appears to be pushing upwards, yet we are bathed in warm vapors. Those who want a vapor bath need not to turn up the gas in the bath-room, or put the servants through their exercises in boiling the pot; they have but to strip and sit down in the garden, where it is warm enough and moist enough to make a fellow sweat away seven pounds of good flesh per hour. But the wind is going round to the north, and in a couple of days we may have sharp frost, and in another couple of days good skating, and perhaps with one day more the ice will be rotten, the skaters will tumble in by dozens (as they did the other day on the Serpentine, in Hyde Park, as if members of a voluntary death-by-drowning society), and then again a sloppy sweat, and joints of meat, ordered in to hang, turning green and clammy, and beautifully clothed with mildews for the microscopists. I date from a wet valley on the immitigated and almost immitigable clay on the north side of London, the head of a tributary of the Lea. (You must have heard of the Lea as the drowning place of hundreds of London lads.) And the quantity of water passing over the weir in my garden would supply a fair sized town, if only it could be properly filtered. Our case is that of the ancient mariner,

"Water, water, everywhere;
And not a drop to drink."

Fact, I assure you; we pump up a sort of thin mud, and by the aid of filter obtain dilution for our grog and tea-kettle, a dissolver of our tea. A very strange place is London. Within four miles of it, this way, you may find melancholy marshes, peopled with king fishers in summer, and snipes in winter, yet from the midst of these marshes London is to be seen, a dark cloud by day, and at night a red fog, the redness being caused by the

innumerable lamps glaring in the murk and moisture. Probably, with all your advances (and we know something of your go-aheadedness), you can form no idea of the enthusiasm with which we practice horticulture. Every citizen who can keep a rural box and half a pony, grows good grapes—better grapes than are commonly seen on the tables in European cities, and the names of the newest of the pelargoniums, chrysanthemums, fuchsias and roses, are "as familiar in their mouths as household words."

The quantity of glass employed in suburban gardens is truly wonderful. Why, look at the advertisement pages of our horticultural journals (we have three weeklies and about half a dozen monthlies; I will give you an account of them some day), and judge by the competition of advertisers how vast is the trade they are doing, or would wish to be done. I know nothing, except through book information, of the characteristics of American gardens, but have no doubt at all that my first impression, on a visit to New York, would be the paucity of glass in gardens. Yet, perhaps, we have less need of glass than you; our winters are so mild, as a rule, and when a good nipping frost occurs it rarely lasts beyond ten days, so that a cooling may help soft greenhouse plants, and the knowing ones get through this part of their work by means of most rough and ready methods.

I have been led into these observations perhaps because, as remarked above, your invitation reminds me of my debts. I am indebted to Mr. Bresee for samples of his seedling potatoes; and to Messrs. Bliss & Co., for the same; and to a gentleman (I forget his name now, but his letter is in the great, grand reserve drawer, which I shall dig into if it should ever please the Almighty to give me one week's peace of mind)—a gentleman who corresponds with Messrs. Bliss, and who sent me samples of all the best sorts of pop-corn. Your potatoes—I mean your own potatoes—interest me immensely. I feel convinced for the present, though I may prove to be in the wrong, that there is in your race a taint of blood we have never had, or, if we have had it, there is no impression left therefrom in what I will call our race.

Not one of our potatoes has the upright, bushy growth of yours. I am not guessing when I say this, for the Stoke Newington collection comprised, only three years since, 250 varieties. We obtained from Messrs. Gibbs, of Down street, Piccadilly, London, a field potato of the greatest promise, called "American Red." Judging it by its merits, I should say that you know it by at least half a dozen names. We had a terrific frost on the 25th of May following, and all our sorts, then growing luxuriantly, were cut down to the ground, and as black as ink, save and except this American Red, which stood up like a bush, green and unhurt, proclaiming to me that there was a seminal strain in the plant that we did not possess, the result of breeding from species of the wild potato that probably has never been introduced to Britain. Some of your potato fanciers may be able and willing to illuminate the British pomdeterrigists upon the subject.

Surely you will not be surprised to hear that our trial of pop-corn resulted in a complete failure. We can grow maize. Oh, yes, we can. But we can only grow it as a curiosity, we cannot grow it as an off-hand garden or field crop. The thirteen sorts of pop-corn sent to me last year, were sown in the first week of May. The weather that followed was unfavorable, and only a tenth part of the seed germinated, and not a single plant produced a single cob of corn. I could have grown cobs, of course. By starting the seeds in a hot-bed; by potting off the plants and nursing them like seedling geraniums; by planting them out on hills of manure, and giving shelter at night, we might have had a crop. But that would not have been a fair trial. If we are to grow pop-corn, it must be by rough and ready methods, for it cannot rank with us in importance like such things as tomatoes, capsicums and cucumbers, to which we give just the kind of attention which maize requires to make sure of it. Our noble-hearted but too impetuous William Cobbett advocated maize so ardently as to delude thousands—in fact his two great delusions were the maize and the locust tree, two capital things in their way, but not adapted for English cultivators to get bread and cheese out of. But what a pity it is that our climates do not more completely assimilate. How pleasant it would be to compare notes with you on equal terms, and to exchange freely our several products and notions without impediment of weather. We should get through Alabama difficulties if we could stand on the same platform in the matter of eating and drinking; but here, to begin with, Nature denies us American potatoes

and pop-corn, and the breadth of the Atlantic is as nothing to separate, compared with the necessary diversity of tastes occasioned by the differences of our climates.

You may have heard of my labors in collecting and cultivating ivies. The Stoke Newington collection is the result of fifteen years application to the subject. It comprises now exactly fifty varieties, a great many having been destroyed in order to limit the collection to the most distinct and beautiful. Lately I classified and named them all afresh, for the names they bore in the catalogues were long enough almost to reach from here to you, and absurd enough to stagger an Ojibbeway pundit. My names were all founded upon characters. I abolished all the stupid commemorative names, and deceptive names, and fanciful names, and, oh dear, the pedants of *our* botanical world were all aghast at such an inroad of common sense. You shall have a copy of the paper on Garden Ivies which I submitted to the Linnæan Society. Criticise it freely, and if you think a nomenclature founded on characters worthy of respect, uphold it without flinching on your side of the Atlantic.

SHIRLEY HIBBERD.

Pencil Marks by the Way.

BY OCCIDENTALIS.

The Lessons of the Year 1869.

HERE, in the Northwest, where the past season has been a remarkably wet one, the cultivators of the soil have been taught one lesson at least they would do well to profit by, that is—DRAINAGE.

Some will begin at once to put in practice what has been taught them at so much cost; others, failing to comprehend the lesson, will go on as before, without drainage, and with shallow culture, wondering why they can realize no crops. All clayey sub-soils, whether of timber or prairie, need more or less of underdraining, and are really unfit for fruit culture without it. And these lands, with the proper amount of underdraining, are regarded as the very best for that purpose.

And, then, as to DEEP CULTURE: farmers' clubs may discuss weekly, for a lifetime, the question of deep or shallow plowing, the sentiment is all but universal, and is daily gaining strength, that *deeper culture* is necessary the country over. Deeper culture! Deeper culture! is the cry from Maine to Georgia; and implements for effecting it are daily in greater demand.

While deep culture can be more readily reached by means of improved implements, and at comparatively slight expense, drainage is, and must be, costly. The best artificial drains are doubtless made of tile; and with this on the ground, at the high price of labor in the West, they cannot be laid at a less cost than about two cents per foot. So that, with first cost of tile and transportation added, the proper drainage of an acre of ground cannot fall short of sixty to one hundred dollars. Besides, as yet there are comparatively no tile manufactories in the country. As these increase—and they will increase as the demand increases—and the high cost for transportation is reduced, tile draining will largely increase, and will be found to pay a good return, and to none more than to the fruit grower of the Northwest.

DRAINAGE and DEEP CULTURE, then, I regard as the two chief lessons taught the fruit growers by the memorable season of 1869.

Bad Luck in Fruit Culture.

There are difficulties in the way of fruit growing, and they are many and formidable. Yet is it not a fact that many who engage in the business do so without any adequate conception of its requirements. It is safe to say that a fair amount of skill, of energy and common sense, brought to bear in the cultivation of fruits, will be productive of results little less satisfactory than in the culture of other crops. There are difficulties in the way in whatever a husbandman undertakes. His grain crops fail or fall short through the influence of unpropitious seasons; his hogs die of cholera; his cattle fall victims to disease—and yet farmers continue to raise cattle and hogs and sow grain, putting the proceeds in their pockets, and thanking heaven for the blessings dispensed.

There is an unaccountable delusion in the public mind in regard to the requirements of fruit culture. Men of good sense and large experience in other matters will act in this without any reason or judgment. They will exercise a sound discretion in all other branches of farming—will plant corn and get good crops; will sow wheat and realize a handsome

yield; will raise cattle, and hogs and sheep—observing all the known rules of economy and profit governing in such cases, and yet, when they come to try their hand at fruit culture, all their good sense seems to have deserted them. They blunder along from year to year, and accomplish nothing; all the time complaining of their bad luck, and railing at the nurseryman, or, what is worse, at Providence, for causing their misfortunes.

One desires a crop of potatoes. He knows that to obtain a good yield he must plant good seed in good soil, and in the proper season, and he must give them the requisite cultivation. Another desires a crop of corn. Like a sensible man he puts his land in good order; he plants his seed in good season; he plows, he harrows, he hoes; knowing all this to be necessary. And his eyes dance with delight as he watches the growth of his crop, the result of well applied labor and toil.

Let men display the same amount of common sense; let them expend the same amount of energy, and the same due diligence, in the planting, care and growth of fruits, that they do in other branches of business, and, my word for it, fruit culture will be rendered much more profitable and a much greater success.

Yet I would not be understood as urging that there are no more impediments in the way of fruit growing than of most other branches of farming. There are more—and less easily overcome. Fruit trees have their diseases, and they have their many known and unknown insect enemies. And the fruits themselves also have their thousand and one known and unknown enemies. To be entirely successful these must all be fought and conquered. But what I do urge is, that a vast majority of those who do undertake to grow fruit, do so with much less of care, of patience, of energy, of sound judgment, than they bring to bear upon other pursuits of life.

On the Bluffs of Northern Egypt.

That long peninsula of prairie and bluff, hill and crag, and woodland, reaching from Cairo northwardly, and across from the cotton woods of the Ohio to those of the Mississippi, is known, in western vocabulary, as *Egypt*, and its people answer to the title of Egyptians. The southern boundary of this Egypt is sharply defined; but its northern—indeed it has no northern boundary; or I have never yet been able to find that geographer who could locate the northern confines of this Egypt of the New World. The Sphynx and the Pyramids are presumed to be somewhere near the confluence of the two rivers; but as we recede towards the north star, Egyptian characteristics become less and less distinct, and gradually die out altogether.

On the bluffs of the Mississippi—or, I should rather say, *among* the bluffs—many miles away from Cairo, lies the little city of Alton. Whether this city, and the excellent and eminent horticultural society of which it can boast, are in Egypt proper, I am unable to say. North of them they are called Egyptians; south of them they are regarded as "outsiders."

Be this as it may, it is of this body of good and true men that I would write. Live men they are—every one of them; active and untiring in their work; pursuing what they undertake with a zeal and persistency that never flags; they have maintained an organization for years that has come to be a power in the land. They have scattered the fruits of their work broadcast over the prairie State and the West. They have inspired the Egyptians south of them, and the Yankee invaders north of them, with a love for their noble calling. Not only live men themselves, they have given life and energy to kindred associations around them; and they have contributed largely to make the Illinois State Horticultural Society what it is—one of the most influential in the Union.

I pay this tribute to an association of men, with not one of whom I have the honor of a personal acquaintance. But I have been largely benefited, I hope, by their work. I have read their monthly discussions with an interest that attaches to few others; and I have lying before me a long list of their publications—issued lately in neat pamphlet style—the contents of which will fully justify what I have written.

How two or three score of such men as Flagg, and Hull, and Starr, and Long, and Pearson, and Barler, and Kingsbury, and McPike, *et. al.*, came to be congregated so near to a given point, and that point so near to the borders of Egypt, is inexplicable. Can the Sphynx tell?

Practical Papers.

No. IV.

A Shady Spot in the Garden.

BY OLAPOD QUILL.

I HAVE, in my former notes entitled "Practical Papers," endeavored to give, in a pleasant and suggestive style, practical, amusing and valuable information upon matters horticultural, ornamental and scientific. Uniting the useful and practical for the benefit of those who might desire to improve upon a few practical hints and experiments in ornamental gardening and floriculture.

For this paper you are indebted to a "shady spot in my garden;" to "an hour's cogitation in my rustic armchair," within a quiet little nook or border planted with shade trees, whose foliage was so dense that I hardly knew what to do with it, or how to begin any improvements.

This part of my garden was near the carriage drive-way or road, and a portion of the same near the dwelling-house bordering upon the same, was a beautiful grove of some eight rods in length, by an irregular shaped figure from four to eighteen or twenty feet in width.

The trees composing this little grove were the Mountain Ash, Maple, European Larch, English Alder, Hemlock, Yellow Birch and Norway Spruce. Some of these trees are of large size and very symmetrical, particularly the Norway spruce, which skirt the outer edge of the grove on one side. So dense is the deep green foliage of these trees in some portions of the border, as almost to exclude the rays of the sun. Unadorned and quiet in its natural state, it offered an agreeable and cool retreat as one could desire from the meridian rays of a summer sun.

Seated within a rustic chair, within this pleasant arbor, the thought arose—

"How can I make this place more beautiful?"

What shall I add to this oasis of the garden to make it more elegant? What union of the artificial with the natural shall I combine, and how shall it be done? This was the plain question; and it needed a like plain and practical solution.

Having an abundant supply of water at command, I first formed a small, irregularly-shaped basin in the centre of this grove of trees, choosing the widest portion of the grove for its location, and nicely bordering the exterior with small sized stones laid carefully in cement. All around the sides of this basin I placed irregularly shaped stones, making first such a basis as would be needed for a natural fernery and garden for the culture of aquatic plants. Here the delicate flowering vines requiring protection from the intense rays of the sun, requiring shade and moisture to develop in all their beauty and grandeur their curious properties of leaf and flower, would find a genial shelter. With me, to think was to act; and any one who is desirous to witness the result, has only to take a seat in "my rustic chair," and he will behold, rising amid this grove of trees, a jet d'eau to the height of some seven feet, which falls in silvery spray into the basin below, giving life to and sustaining the great variety of plants and vines which adorn its sides.

The outer edges of this grove being of considerable extent, in some parts from four to fifteen feet, is laid with stones of a like irregular character and form, with here and there a larger sized Boulder stone, to break the monotony, interspersed with a few crevice rocks piled one upon another, over which the various plants are trained in a manner, although highly artistic, to resemble as much as possible the perfection and simplicity of Nature in her wildest woods.

It were hardly possible for one to imagine how beautiful such a place* may be made; how much of life and pleasure will spring up from such a little cloistered spot, until he tries to produce such results.

I would say to all who take in the adornment and floral cultivation of their grounds, to count NO SPOT AS IRRECLAIMABLE, AS ONE IMPOSSIBLE OF IMPROVEMENT, until they have first made the same an "experimental ground;" let such count not the most barren and uninviting spot about their grounds as devoid of beautifying influences, a wild waste of tangle wood. With this introductory paper I simply place my subject before you.

* Every one has just such a place in some portions of his garden.

In my next I shall report progress, and if my *old friends* and *readers* are pleased to follow me in my "*experimental vagaries*," I will endeavor to scatter a few green leaves by the wayside, and from time to time inform them of the result of my cogitations, or an "HOUR AMONG THE FERNS."

Fruit Raising in the West.

Where Shall we Plant?

PROBABLY no one question of all the questions which have been discussed upon fruit growing has received any more study and thought than the second one of this caption —not even what to plant—rivals it in importance—or in amount of study bestowed upon it. Would that we were able to say that this study, investigation and experimenting had always proven of a uniform healthy nature, successful and conducive of good results.

In this communication I shall have especial reference to the culture of the apple—which though it has had a life thus far of variableness, has for the last eight years been steadily gaining ground and growing in favor—and though our orchards are growing older and larger, that vexed question still remains unsettled—*where to plant*?

Not very many years since the valleys, sunny warm ravines, were thought the best and only sure location for an orchard in so cold a climate, but trees here were found to die; the other extreme was then resorted to, viz: the hill-top, or even a north exposure, where "a tree once frozen would remain so till warm weather came in earnest," well nigh unto July sometimes. That new comers to a cold climate should be led to adopt the first location, viz: the valley, is not at all surprising, and to consider some of the reasons of failure may not be amiss, and prominent were unsuitable varieties with the then inexperienced tree planters, and poor or only partial preparation of the soil—the particular lack of attention being the drainage; but not to enlarge upon this location, I notice the other extreme, viz: the hill-top, or cold aspect, with a free circulation of air. Why do trees die here? I may answer it Yankee-like. Why are the oranges of Florida, or the peaches of southern Illinois, killed betimes? Is it not the cold, and to avoid the danger of repetition do the orange growers seek a cold aspect for their future plantations; or will the Illinois peach-grower plant all his future orchards in the coldest and most bleak aspects of his farm? And yet the orange, the peach, and we may add, the apple, are fruits worthy our best efforts "for a' that." But why not plant upon the hill-top? If a steady even temperature is to be sought as indispensable, here it will be found; as most well know who have spent much time in an open hilly country. But is it a continuous steady cold that we so much require for the preservation and successful growth of fruit trees, but rather is it not this same continuous steady cold that is killing our trees? If the ambitious amateur were to try here the known tender fruits among raspberries, or any other class, would he in reason place them in the coldest corner of his garden; or would he not seek the more sunny aspect where the winter blast would not have full force upon their tender mercies?

In some parts of the Union there may be good reasons for planting upon the hill-tops—we would instance southern Illinois—where they must guard against the extreme damp and fogginess of the valley, where it is betimes almost like night till well into the day—so dense are the fogs, and in a climate from which they can select a very large list of varieties; but in the farther northwest we have no such damp and fog to guard against, and, too, a more limited list of varieties to select from. The advocates of the hill-top system say we must guard against the winter's sun. Now here we come to the question of questions. Is it the winter's sun (heat) or the winter's cold that kills our trees? We answer this squarely and briefly, that we do not believe that the sun, or the heat derived therefrom, ever yet killed a fruit tree in Wisconsin, either directly or indirectly, but the reverse, viz: a certain degree of cold—and why not? Why may there not be a point or degree of cold beyond which an apple tree will cease to live, as well as with other fruits we have named? As evidence we might cite the often root killing of trees, while the top remains alive for months, or until the sap of the body is all exhausted by the half grown leaf. Then if the hill-top, bleak exposures and valleys are to be avoided, where, oh where shall we plant?

In Wisconsin we have winters as "cold as Greenland"—not actual, but comparative—as variable as can well be imagined, as the last twenty-four hours will testify—rain, bright March, or almost May sun; thunder and lightning, and last but not least, a change to *forty degrees colder*, and all within a few hours—then our favorite clime gives us wind, to the perfect gale which sweeps everything—and though the west is noted for its clear bright sunshine, yet the past year has been remarkable for its cloudiness, as the record from January to October, 1869, inclusive, shows it to have been 52 per cent.

By reference to the Meteorological observations, as kept at the State University, I find that the prevailing winds of the season have been from the southwest and west, being 36 per cent; next, northwest and west, 33 per cent; northeast and east, 15 per cent; and southeast and south, 16 per cent. With these facts before us, and the knowledge also that the northwest abounds in or is noted for its winds, will not the future orchardist seek for his orchard site such a location as to *guard against* the exposures of cold or severities of the wind. Add to this the fact that the *morning sun* is as welcome and as beneficial to the fruit tree as to our own humanity; that it is conducive to health and longevity; that nothing can be more beneficial to life and health than a bright morning sun, to dry up the dews and damps of the night; to encourage a clean vigorous growth to all the vegetable world, and to none more welcome or conducive of better results than upon the apple, which ever has a tendency to retain its moisture and to encourage a bark moss growth; and does not the numerous southeast and eastern hill slopes readily suggest themselves to us as being just the place for our orchards? Of these aspects we have an abundance, especially in the timber portion of the State, and in the bluffy districts bordering our streams; coves, or pockets, well protected from the prevailing winds, and where now are many orchards budding into future hope, giving signs of the times that ere long they will blossom as the rose, and bring forth fruit of its kinds.

O. S. WILLEY.

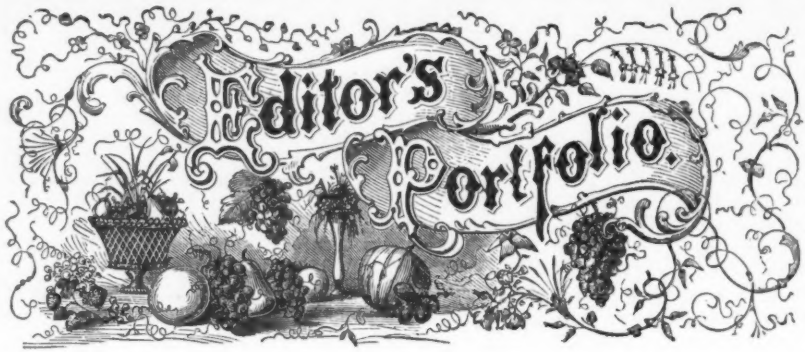
The Vine.

EVERY years' experience gives some new knowledge in fruit culture. But all need to keep constantly in mind what may do well in one locality will not in another.

Some are speaking highly of Eumelan. My "Extra" $3 vine from headquarters, did not ripen six inches of wood; the leaf mildewed badly. I think the leaf not as hardy as the Delaware, and I suspect from the looks of the cluster that its stamens are not as perfect as the Delawares; however, I have not examined them. One-fourth of my Marthas rotted; Rogers, No. 3, did not fertilize one berry in ten; its stamens are so imperfect that it has not made one-fourth of a crop yet, and is not worth cultivating. The Concord rotted and mildewed much worse than the Delaware, Iona and Isabella. I have, January 18th, Ionas, Isabellas, Crevelings and Catawbas. The Iona keeps the best, and does not drop from the stem, and will ripen better than the Catawba on light sand or gravelly soil. Concords and Crevelings blighted badly, where the Delaware is exempt and makes a good crop. The Delaware had this year from 20 to 40 degrees less saccharine matter than last year. I think the Iona will make better wine than the Delaware, at least it is tending that way.

Some farmers that planted vines a few years ago, while the grape panic was raging, wish they had not planted. But those who have made it a speciality, on a suitable soil, are not discouraged if they have not realized the expected fortune, and find it takes capital, time and perseverance to insure success in vine culture.

A. J. MOORE.



Editorial Notes.

Engagement of Shirley Hibberd on the Editorial Staff of "The Horticulturist."

We have the rare pleasure of announcing the engagement of Shirley Hibberd, of London, England, as an Associate Editor and Special Foreign Correspondent.

Mr. Hibberd is already well known to all our intelligent horticulturists, as the accomplished and popular editor of *The Gardeners' Magazine*, published in London, acknowledged to be *the best Gardener's* and Horticultural Journal published in that country. He is also editor of *The Floral World*, a monthly magazine devoted to floricultural subjects, and also the author of many very popular horticultural volumes, which have made his name a household word all over "Merrie England," fully equaling that of A. J. Downing here in America.

Mr. Hibberd's first communication appears this month, and he will write *regularly* every month for our pages, giving in a free, conversational style, and a pleasant spirit, notes on the progress of horticulture in England, best calculated to interest American readers. Our readers may expect a rich treat from our new associate constantly, and we would be pleased if our friends *will pass* The Horticulturist *around freely, and call attention to our announcement.*

Gardeners and florists will do well to enrol under our banner. We have other good things in store for them.

Superphosphates in the Garden.

With due respect to the more wise advocates of fertilizers, we are compelled, after two years' trial, to state our candid belief that they are *not worth the money asked for them*, and are a very poor substitute for manure of home manufacture.

Occasionally we find a particular manufacture does exceedingly well, and we feel satisfied; but subsequent effects are never as good as the first, and the dose has to be increased to produce equally good results.

A perfectly pure article of *bones, bone meal* and *ground bone*, we find in every way worth using, and do use constantly, but a good superphosphate is very rare.

We advise every one having light, poor land, *not to use fertilizers entirely*; it is money wasted. It is far cheaper to buy good *manure* at $2 and $3 per load, or $10 per cord. But it is better still not to plant the land until well worked up into good condition. First get out muck and apply thickly in doses of a couple of hundred loads per acre. Let it lie and rot during the winter; then in the spring plow it in; then sow clover, and at the proper time plow that in, and then, when you come to plant vegetables or small fruits, you have got a bank of *vegetable earth* beneath which all the superphosphates ever made cannot compensate for. Chemical analysis is a nice science, but we are old fogy enough to prefer the ordinary ways of fertilizing land, and we shall use no more artificial fertilizers, save as stimulants occasionally.

Plant Shade Trees.

We are intense lovers of trees, and wherever we go we repeat the words—*plant trees! plant trees!*

An incidental benefit of the practice of planting trees came lately to the notice of a Canada farmer who had been planting shade trees along his roads, and around his house, and up and down his lanes. The climate previously was so severe that he could raise little or no fruit, but when his shade trees were grown, he found he could plant fruit trees too, and make them yield abundant crops.

We are reminded of the old Scriptural saying—"He tempereth the winds." So doth the planting of trees temper the climate to the tender vines and buds within the lines of protection.

Special to Contributors.

SEND us notes this season of your fruits, strawberrries, vegetables, and all large and small fruits. We are anxious to have our readers communicate their experiments and experiences. Read this number of THE HORTICULTURIST, and see how freely our correspondents write. Every line from you containing a *hint*, or an *idea*, or an *experience*, will be highly appreciated.

Horticultural journals would be twice as valuable to their readers if their correspondence were greater. We want more contributors, *practical men*, with good ideas, who will send short paragraphs of their daily experiments.

Strawberries for Testing.

IF anyone wants a few of the new varieties for testing, we would recommend Charles Downing, Boyden's No. 30, Napoleon 3d, and Barnes Mammoth.

We have found these uniformly excellent, and worthy of a general trial. The Barnes Mammoth is the most firm of the four, and best fitted for market.

Green Crops.

HAVE any of our readers any experience or ideas about what kind of *green crops* are best to use and plow under in preparing land for small fruits? Please communicate.

Distances for Planting Pear Trees.

WE would recommend fifteen by fifteen feet as more economical than the old rule of twenty by twenty—still adhered to by many. Where pear trees are trained in the *pyramidal form*, one space will be found amply sufficient, for very few trees will have a spread of over twelve feet, and rarely fifteen. In the grounds of Marshall P. Wilder, at Dorchester, the pear trees stand as close as ten feet from each other, and yet are fifteen to twenty feet high, and usually loaded down with abundant crops. We did not observe any inconvenience from their nearness, and no tree interfered with its neighbor; still it is nearer than the cultivator can manage with greatest comfort and cultivate properly. Dwarf trees are universally set ten feet apart, and experience has made it a good and convenient rule.

Illustrations of Pears.

WE call special attention to the fineness and elegance of the engravings of pears in this and the previous number. Our January illustration was fairly murdered, although the specimen fruit was very fine, and the engraving went through the hands of three engravers. We have since then found, most luckily, some new artists, whose work cannot be excelled, and will bear the most critical examination.

Missouri Mammoth.

THIS variety should be stricken from our list, having proved anything but mammoth in size, and totally unreliable in productiveness. It is not equal to either the Kittatiny or the old Lawton—a most decided humbug.

Early Tomatoes.

EARLY tomatoes are certainly the most profitable, but for family and general garden use they are not the most desirable. The later tomatoes are generally larger, finer quality, and more productive. We observe this season quite a number of new varieties offered, and some contain extraordinary merit, as, for instance, the Gen. Grant and the *Trophy*, the latter being of tremendous size and fine solid flesh. But for ordinary culture it is very doubtful whether anything is better than the Early Smooth Red, for market; or the Tilden and Cook's Favorite, which have been so well and favorably known for a long time. Try the new ones, but do not forsake the old kinds.

Growing Asparagus.

THE introduction of the new variety, *Conover's Colossal*, is destined to work a radical change in asparagus culture for the future. Hitherto gardeners have been accustomed to plant in rows two feet apart, with plants one foot in the rows. The new variety, Conover's Colossal, should be planted in rows four feet apart and three feet in rows, thus practically introducing the system of *hills* instead of rows, and reducing the culture to about the same as for corn, until the roots have spread and filled the whole ground, and the stools have become large enough to occupy the entire space. The new method is certainly the most economical in manure and labor, and original cost of plants.

Girdling Fruit Trees.

Blessings sometimes come in disguise; at least we thought so when we were told of the orchard at St. Joseph, Mich., which was girdled twice by a miserable miscreant last spring, and yet lived and bore the heaviest crop of peaches ever known in its history.

The principle of girdling fruit trees is akin to that of pruning the roots and trimming the branches of the tree, the tendency to wood growth being restrained, the energies of the tree are directed toward the production of *fruit*, and, as a result, we have occasionally splendid returns. No rule can be given how far pruning can be safely carried. It is one of the curiosities of Nature, which every one must search out, but sometimes "*luck*" comes, as it did in the case above, and many a man is blessed who thought he was cursed.

Converting Dwarf Trees into Standards.

The *Dwarf Pear* is admitted not to be the means of producing the highest success in pear growing. The only advantage the dwarf form possesses is a little earlier bearing and a great economy in space. Nearly all experienced horticulturists are now converting their dwarfs, as fast as Nature will aid them, into standards. This is done simply by planting the junction of the quince and pear stock sufficiently deep below the surface of the ground to favor the formation of roots from the pear stock. It frequently happens that trees grown this way are far more successful than in any other, and their quality and size greatly improved. The Duchesse d'Angoulême Pear, grown as a standard from standard roots, is very inferior both in size, quality and productiveness; but when grown as a standard from dwarf roots, its fruit is large, fair and very abundant.

We have seen trees that were productive as dwarfs for eight and ten years, but suddenly would shoot up tall, stout stems and branches, and grow quite vigorously. This is a good evidence that the pear roots have formed from the native stock, and hereafter the tree will be a low standard growing on its own roots. During the first year or two the fruit will suffer a little, as the energies of the tree are bent on the formation of new wood, but this is soon rectified, the tree settles down into a healthy habit of growth, and a steady productiveness that makes the heart of every owner of a pear orchard happy every time he looks over it.

The Old Familiar Green.

By the request of our readers we return this month to our green colored cover, and shall retain it permanently hereafter. We hope to lighten the shade a little in future numbers, and render it more agreeable in typographical appearance.

Spring Catalogues.

Our seedsmen are substantially appreciating the importance of embellishing their catalogues with illustrations of fruits, flowers and seeds, helping to render them more attractive and useful.

B. K. Bliss & Son have handed us their new edition for 1870, vastly improved over previous years by the addition of new engravings and new pages of reading matter. When we add that in typographical appearance it is almost faultless, and in choice illustrations unexcelled in number and variety, we speak only the truth in our hearty commendation of their taste and enterprize.

Peter Henderson's new catalogue of plants introduces us to quite an admirable list of novelties, which we hope will be useful. The new Coleus, "*Setting Sun*," we have seen growing in his greenhouse, and are very much pleased with the delicate colors and beautiful, vigorous habit of the plant.

We are indebted to Messrs. Hoopes, Bro. & Thomas, John Saul, Frost & Co., and George Such, for their favors, which we would be glad to notice at length if our space would permit. We appreciate the mutual rivalry which prompts our principal nurserymen to issue better catalogues every year, and we would remind them that the most effective means to popularity is *a liberal use of illustrations*.

The Edmonds Pear,

Introduced by Ellwanger & Barry, is quite productive. The editor of the *Country Gentleman* says that a young tree of this variety, set out three years ago, bore nearly half a bushel of fruit of excellent quality, in 1869.

French Method of Raising Tomatoes.

As soon as a cluster of flowers are visible, the stem is topped down to the cluster, so that the flowers terminate the stem. The effect is that the sap is immediately impelled into the two buds next below the cluster, which soon push strongly and produce another cluster of flowers each. When these are visible, the branch to which they belong to is also topped down to their level, and this is done successively. By this means the plants become stout dwarf bushes, not above eighteen inches high. In order to prevent their falling over, sticks or strings are stretched horizontally along the rows, so as to keep the plants erect. In addition to this, all the laterals that have no flowers, and after the fifth topping, all laterals whatsoever, are nipped off. In this way the ripe sap is directed into the fruit, which acquires a beauty, size and excellence unattained by other means.

The Best Two Cherries.

Early Richmond, for the West, and Coe's Transparent, for the Middle States, so said the majority of the members of the American Pomological Society.

Rogers' Hybrid Grapes.

Mr. Perry, of the Canandaigua nurseries, New York, perhaps one of the most successful propagators of the grape, in speaking of Rogers' Hybrids, says: "One important thing, but little known, should be carefully looked to when planting these grapes; every second or third row of vines should be either Delaware or Hartford Prolific. These bloom at the same time that the Rogers do, and are abundantly supplied with pollen, which is carried by the winds to the Hybrids, causing the bunches to be much more perfectly formed than they would otherwise be."

Philadelphia Raspberry in Michigan.

Mr. Cross, of Spring Lake Village, Mich., is cultivating raspberries among peaches. He thinks the Philadelphia the most profitable raspberry: 1st, because it bears a season earlier than the Black Cap, and 2d, because it brings a better price in the market. His Philadelphias brought twenty cents a quart in Milwaukee, while Black Caps were selling at twelve cents. He gathered from his Philadelphias as many as 123 quarts in a day this year. He thinks the raspberry, and especially the Philadelphia, the poor man's fruit, as it bears a crop the second season, and within about fourteen months after planting.

His method is to drive in stakes about two feet high, about a rod apart in the rows, and draw small wire along on the tops of the stakes, as tight as possible. To this wire the cane can be tied so as to keep the fruit from the ground.

Cost of Osage Orange Hedge.

A farmer in Missouri has made a calculation as to the cost of the different modes of fencing, and found that the Osage orange was the cheapest and most durable. He gives the cost of 100 rods of Osage orange fencing, planting and cultivating same for three years, which is $23. The cost of fencing with rails, 100 rods, is $58; with post and plank, $220, thus showing the cheapness of the Osage orange. He says he has an Osage orange three years old that would turn stock.

Hanging Baskets.

A room, whose windows are filled with plants, flowers, and hanging baskets, has a *living charm* in it for old and young. Some very pretty little ornaments can be made at but very slight expense, and produce an exquisite effect. For instance, the *sweet potato vine*. A tuber planted in a hanging basket, covered with earth and moistened slightly, at occasional intervals, will commence growth and throw out its long stem, and twine around the side arms of the basket, adorning it with one of the prettiest of all climbing vines. A writer in *Hearth and Home* recommends another simple basket.

"We have seen one made of cocoa-nut shell, with the upper section nearly sawed off and scarlet cords attached, planted with Moneyworth. Its trailing stems, extending half way down the window, filled with its bright golden blossoms, might have graced a Fifth Avenue drawing-room, so exquisite were its proportions, as bright in coloring. For larger baskets, buy, at the woodenware shops, a wooden bowl twelve or sixteen inches in diameter. Bore three holes at regular distances for the cords to support it. Then ornament with rosettes made of halves of the coffee-bean not roasted, grains of rice and small black soup beans. Any girl of common ingenuity can make a pretty one with these materials. Attach them to the bowl with common glue dissolved in water or whisky—if dissolved in the latter it does not set or harden until used.

"When it has dried, varnish with black varnish, which is readily procured at little expense at any paint shop or carriage manufactory.

"When that is dry ornament the edges with all-spice berries strung on wire. Now attach the cords, and you have as handsome a basket as the shops can furnish, and the expense is very small. A wooden bowl can be ornamented with the scales of the long pine cones. Each scale can be nailed on with upholster's tacks, first boring the holes, and after the bowl is covered, varnish with brown varnish. Even the varnish can be made at home, if one chooses. Buy two or three ounces of asphaltum and dissolve it in turpentine or kerosene, making it lighter or darker as one desires, by adding more or less of the asphaltum."

The Dorchester Blackberry.

A correspondent of *The Iowa Homestead*, living at Eldora, Iowa, is very well pleased with its cultivation.

"The first season's growth gave some protection during the winter. The next winter, which was that of 1867 and 1868, I gave them no protection whatever, and they came out sound and healthy and bore a full crop the past season, fully verifying all the good qualities and noble characteristics ascribed to it. Fruit large, oblong, oval, slightly pointed, black, sweet, rich and excellent, leaves broad, oval, do not sunburn, ripens early; berries quite firm for good market variety."

Editorial Note.—The Dorchester is the earliest of all varieties we have cultivated, sometimes ripening even before the Wilson. Unless grown on very rich land, it does not grow to a large size, and does not produce a large crop. If well treated it is very profitable. As a family fruit it is excellent, being of an exquisite flavor and very small core.

Fruit Culture at the West.

Our Western horticulturists and horticultural societies have been quite active the past winter, and their discussions have elicited much valuable information on the methods of growing and pruning fruit trees, with animated reports on insects, and success of new varieties. We report in brief the most interesting portions.

Value of the New Grapes in Ohio.

At the annual meeting of the Ohio Horticultural Society, at Dayton, Dec. 3, 1869, the new grapes received special attention, and Mr. Bateham has favored us with abstract of remarks.

Eumelan.—M. A. Stevenson, of Clyde, Ohio, fruited this variety the past season—having several good clusters on a vine received from Dr. Grant, in the spring of 1868. The growth of the vine was remarkably vigorous and healthy, as much so as the Concord. The fruit was nicely colored on the 1st of September, and ripened as early as the Hartford Prolific; while the quality he regards as equal to the Iona, which is high praise. The foliage was quite free from disease, and the growth of wood from a two-bud spur, was four canes of uniform size, from eight to ten feet in height, with short joints and ripened to the tips. He planted 500 Eumelan vines, and his brother the same number the past spring. Their only object is to grow the best grapes for the market, and they feel persuaded that the Eumelan will take rank as one of the best "for the million."

Dr. Warder and Mr. Campbell spoke quite favorably of the Eumelan vine and fruit, from what they had seen of it the present year, and Mr. Elliott did the same, with the remark that no man should plant largely of a new variety till fully tested.

Walter.—Not fruited yet in Ohio. Mr. Elliott has grown the vine two seasons; foliage failed this year about as much as Delaware; vine much more vigorous and apparently hardy; thinks it promises to be valuable. Mr. Campbell said the foliage had failed badly with him, especially the present season, but he would not condemn any vine for failing this year. Dr. Dunham also spoke of the failure of its foliage this year. Mr. Bateham said the branches of vine laden with fruit, exhibited by Mr. Caywood, were proof that the Walter was sufficiently productive and vigorous, and the fruit is shown to be rich in sugar.

Iona.—A box of this fruit was presented from Judge Phillips, of Berlin, which was freely tasted and commended. Judge P. has found it one of the very best for market and family use; more reliable than Catawba and of better quality; keeping finely till the holidays. Mr. Bateham counted it the best variety on his grounds, but he was free to say it had not ripened as perfectly the two past seasons as he could wish; though he attributed this mainly to over-bearing, which he would try to prevent next year. Several members spoke of some failure of the foliage of Iona, as well as lateness of ripening the past season.

Croton.—Mr. Bateham spoke very highly of this new seedling of Dr. Underhill's, but said the Chassellas flavor of the fruit excited apprehension, that like Allen's Hybrid, the vine has too much of foreign blood to be reliable in this country. Mr. Elliott said he had three vines of the Croton which had grown satisfactorily the past season, holding their foliage quite well. He should leave one of them uncovered during the winter to test the question of hardiness. He had hopes that the variety would prove valuable, at least as an amateur variety. The foliage has a little of a foreign cast, but not as much as the Rebecca or Allen's Hybrid.

Martha.—Mr. Elliott said he had been slow to express commendation of this grape, until the present season he had seen the vines so healthy and productive at Mr. Knox's and the East, and the fruit so good that he was disposed to speak well of it.

Mr Bateham said the vines were quite healthy and productive at Mr. Leick's vineyard at Collamer, as well as at Mr. Knox's; and he would give an incident which had recently come to his knowledge, illustrative of the market qualities of the fruit. Mr. Knox sent a small lot of well ripened Marthas to the Philadelphia market, as an experiment, and found them to retail readily at the fruit stores for fifty cents a pound; and a gentleman, who is preparing to grow fruit extensively near that city, was so highly pleased with the fruit and the accounts of the vine, that he was induced to buy of Mr. Knox 5,000 of his first class vines for $5,000. A very handsome sale for this dull season.

Mr. Campbell said he was one of the first to propagate and recommend the Martha, as he was early convinced that it would prove like its parent the Concord, a most hardy and reliable variety; and he was gratified to find that this very trying season had so fully confirmed all his former impressions respecting it.

Salem, Wilder, Merrimack, and several others of the Rogers varieties were mentioned briefly, but nothing elicited which has not already been published. Mr. Campbell said he had high hopes of them, notwithstanding some defect of foliage this year.

Annual Meeting of the Illinois Horticultural Society.

This Society held its annual meeting at Ottawa, Ill., last December 14, and a few succeeding days, and from its character as the leading horticultural society of the West, the discussions were of

more than usual interest. We have condensed reports from the *Western Rural*, *Journal of Agriculture* and *Chicago Tribune*, and we have endeavored to make them as full as the materials within our reach will allow.

Nectarines.—Dr. Hull, Alton: The Elruge is the only one that is valuable.

Reported by O. L. Barler.

The following is the discussion on cherries at the Illinois State Horticultural Society:

Belle de Choisay.—Dr. Hull, who is the most successful grower of sweet cherries, said: This excellent cherry is very liable to rupture of the bark, probably from the effect of cold weather. It has also the fault of shedding its leaves. It is an early cherry, but not very productive; quality generally considered best.

Belle Magnifique.—Dr. Hull: This is a fine cherry in some respects, and it is quite hardy and productive, and of good quality. It is a late variety, and coming in about the 1st of July, is valuable on that account.

The President, Tyler McWhorter, Mercer county: How about the ripening of the fruit? Does it ripen uniformly, all about at the same time, or is the ripening carried on gradually?

Dr. Hull: It ripens gradually, and not uniformly at the same time.

Bigarreau.—Dr. Hull: An excellent cherry, and hardy as the majority of cherries. Very large and early fruit.

Black Eagle.—Dr. Hull: This tree is late in coming into bearing, and then bears moderately. If you are willing to wait eight or nine years for the fruit, then plant it.

Wier: With him very early and productive, quite hardy.

H. C. Freeman, of South Pass: I would ask whether cultivating and high manuring will not force the tree into bearing? I know a large tree that bears abundantly, which has had special treatment and high manuring.

D. B. Wier, of Lacon: I have no doubt that I can grow as many bushels of sweet cherries as I can of Early Richmond. My plan is to bud on the north side of the Early Richmond, and then plant in rows north and south, close together. We have trees in our town—old trees—that bear well, and are sound to-day, with no other protection than being planted on the north side of a building. What they want is the protection of a tree or building on the south and south-west sides. With this special care and treatment we can grow sweet cherries.

Some one suggested that if it was true that he could grow the improved cherries as abundantly as the Early Richmond, it would pay him well to drop everything else and grow cherries alone.

Black Tartarian.—Dr. Hull: This is a beautiful early cherry, excellent quality, and productive, but as a tree it is faulty. It is not as hardy as some other kinds. I think we can dispense with it.

Cleveland Bigarreau.—Dr. Hull: Exceedingly productive. I do not know any tree that bears more fruit. The tree is a fair grower; it is more than a medium grower.

Elkhorn.—Dr. Hull: I regard this as the finest cherry of the *heart* varieties. The tree is a fine grower and exceedingly productive. I have seen them growing and doing well in the different parts of the State.

The President: In regard to these heart cherries do you think it practicable to introduce them into the different parts of the State?

Dr. Hull: I do not know why they should not be generally planted.

Early Purple Guigne.—D. B. Wier: This is a very early, hardy cherry, of best quality, and I think it can be grown further north than most others.

Elton.—M. L. Dunlap, of Champaign: This is the only variety of sweet cherries that has produced any fruit for me. I did get two or three quarts of fruit from this tree. It was two or or three years, however, in doing so much. (Laughter.) I have been very unfortunate with sweet cherries.

The President regretted that there were so few who knew anything about this class of cherries. If others had any experience with them he wished to hear from them.

Smiley Shepherd, of Hennepin: I saw one tree this past summer that had, I should think, half a gallon of cherries. I have placed them in particular locations, where they have succeeded well.

O. B. Galusha, Grundy county: I have experimented with these varieties of cherries for many years. After twelve years waiting and watching they have died, and firewood and a bonfire is the only result.

Arthur Bryant, Bureau county: I do not think it possible for us to grow the sweet cherries on our rich prairie soils. I have tried it to my satisfaction. I did get, on one occasion, one half bushel of cherries. In very rare instances do we get any fruit.

Elias Daggy, Douglass county: I have had some twenty-five varieties within the past sixteen years, and have never had anything but disappointment, and now the trees are all gone.

D B. Wier: Top graft them on the Richmond. I consider them hardier even than the May Duke, thus treated. I have the trees doing well, with no other protection than another tree on the south of them. I have the Governor Wood in bearing from the sixth year.

The President: You are speaking of your location in the Bluffs.

D. B. Wier: No, sir; I am speaking of the second bottom soil on the Illinois river.

Mr. Ragan, President of the Indiana State Horticultural Society, being present, was requested to give his experience with the cherry.

He was sorry to say that they had met with nothing but failure with the sweet cherries, and that they had settled down upon the May Duke, with which they had only partial success, and the Early Richmond, which alone was reliable, and these budded chiefly on the Morello stock. Some upon the Mahaleb.

O. B. Galusha: Have you tried it upon the Mazzard?

Mr. Ragan: No, sir.

Jona. Huggins, Woodburn: We find them doing well planted on the north side of some building. I would recommend this position for planting for family use. I do not think we can grow them profitably for market.

The President: Do you not find, for this reason, that these cherries do well in towns?

J. Huggins: I think so.

A gentleman from Woodford county stated that he knew trees that for many years have borne as well as the Early Richmond; never failed.

The President: I notice that those who have been successful in fruit culture are more forward to speak of this than those who have made failures. Now, we want to hear of the failures as well, for we shall learn quite as much when we speak of our failures as of our successes.

Early White Heart.—Smiley Shepherd: I have this cherry; it resembles the Elton; it bears every year; ripens before the old Morello kinds. The tree branches immediately above the roots, and to this I attribute its healthfulness. It generally succeeds well.

Dr. Hull: It is a delicious, sweet cherry.

Governor Wood.—Dr. Hull: Too tender and not as early as some others.

Sam. Edwards, Bureau county: This is the only tree of all the varieties that has succeeded with me. It is sheltered by an evergreen hedge, and has given us some fruit.

D. B. Wier: The fruit is not of first quality, but has given us crops from the first planting.

Woodward, of Marengo: Growing sweet cherries on Mazzard stocks is a failure; on the Mahaleb it does very well, if the union is perfect, but on the Morello it does best of all.

Gridley.— Dr. Hull: This variety is largely grown in our locality, and is one of the best for market. It is not fully ripe when first colored, and is sufficiently firm to be sent to Red river. The tree is faultless and very productive. I have gathered three bushels of cherries from a tree five years old, which was not more than one-third what it would produce when fully grown.

The President: You speak for your locality at Alton?

Dr. Hull: I do.

Early Richmond.—Suel Foster, Iowa: This is *our* great cherry. The crops are very abundant. All other varieties are uncertain.

English Morello.—Dr. Hull: It is quite hardy, the objection to it is that it breeds insects.

D. B. Wier: It always sells readily and at a good price. The stone is quite large. The tree is perfectly hardy.

O. B. Galusha recommended it.

Late Richmond.—D. B. Wier: We have it, and think the quality better than the Early Richmond.

The President: That is not my experience. The quality is quite inferior to the Early Richmond. The difference is very noticeable.

W. P. Pierson, Iroquois county: There is a grub working in the cherry trees, in our neighborhood, from which nearly all the trees are dying.

Dr. Hull: Describe him.

Pierson: I do not know that I am sufficiently familiar with the gentleman. It is a white grub, about half an inch long, with a flat head. He works under the bark, and leaves his hole full as he goes.

Mr. C V. Riley, State Entomologist of Missouri, said the cherry tree borer was peculiar to that tree, and the remedy was an application of soft soap.

Mr. Pierson further complained that their cherries rotted.

The President: Do they not crack before they rot?

Pierson: I have not observed it.

The President: Was it not the effect of long-continued and heavy rains?

Pierson: We had a good many rains. (Laughter.) I had an idea that it might be the work of the curculio. My trees are on cultivated ground.

The President: Have you known trees to do well standing in grass?

Pierson: My experience is limited. Mine are cultivated. Now, what I want to know is, whether I *must* run the curculio catcher or not in order to get a crop of cherries?

Dr. Hull: You have, sir.

Mr. Riley stated that the rot was not due to the curculio, but to other causes.

Mr. Hull claimed that it was often due to the work of the curculio, and sometimes to wet weather or other causes.

Pears.

ADDRESS BY P. BARRY.

P. BARRY, of New York, read an essay on the culture of the pear. He stated that more than 2,000 named varieties are now under culture. Among these we may select varieties to suit most locations. It is growing in favor. One man in Ohio has an orchard of 16,000 trees just coming into fruit. Pears will succeed on a great variety of soils, and it can be grown to advantage for family use on almost every farm. The soil must be dry in all cases. Some locations are well adapted to large pear orchards, and only in such should large orchards be planted. Shelter is of value for all fruits, but is of especial value for the pear. He would plant belts of trees around the orchards, and evergreen screens at regular distances in the orchard. He would call attention to the necessity of pruning and the thinning of fruit. All require thinning. This is done when the fruit is of the size of a hickory nut. Unless these two points are attended to, we shall have small fruit.

Gathering the Fruit.—Pears must not ripen on the tree. Some varieties require to be taken from the tree earlier than others. The Flemish Beauty, Bartlett and Clapp's Favorite, may be gathered when scarcely more than half grown. The common rule given is, when the stem will part from the twig easily. This is not a safe rule. Experience only can indicate the time to gather. Pears on the lower branches will ripen first. Great care must be taken not to break the stem; if this is broken the pear is ruined. Winter varieties may be left on the tree until the leaves lose their vigor and fall.

Marketing.—The best package is the half barrel. Select clean barrels and pack carefully; shak the barrel in packing, so that each pear may settle down in its place, from which it may not remove. If your pears are nearly ripe, they will carry better in boxes. It is believed by some that pears cannot be shipped at long distances. We know that pears are now shipped from California to New York and Boston, and come in good order.

Assorting.—The shipper will find it to his interest to assort his fruit. Buyers are not deceived by the beautiful exterior, covering rottenness below, but once. Here "honesty is the best policy."

For a general synopsis of the address we are indebted to *The Western Rural.*

"The essential points to pear culture are: 1st. A deep, dry, fertile soil. 2d. A sheltered situation. 3d. Good clean tillage of the soil, including manures or fertilizers when needed. 4th. Judicious pruning and training. 5th. Thinning the fruit and removing and destroying all wormy, diseased and deformed fruit. 6th. Prompt removal of trees or parts of trees affected by blight. 7th. Fill up the places of dead trees with new ones, and of dead branches with grafts, if necessary to restore balance of the tree. 8th. Keep some reserve trees on hand to fill vacancies. 9th. Graft over promptly such as fail, with one that has proved valuable. 10th. Select varieties, as far as practicable, that have proved successful in the locality, or the nearest locality where experience may be had. 11th. Make an experimental plat, where all the varieties of great promise may be tested, and thus ascertain what is and what is not adapted to the locality. The speaker said: The most popular standard pear today is the Bartlett. I think there are as many of this variety alone as of all others. There certainly would be if the trees could be obtained. The other varieties stand about as follows; that is, the present demand for trees would indicate it: Flemish Beauty, B. d'Anjou, B. Clairgeau, Sheldon, Lawrence, Seckel, Howell, Doyenné Boussock, Belle Lucrative, Duchesse d'Angoulême and Vicar of Winkfield. Clapp's Favorite is rapidly growing in favor, to precede the Bartlett. Osband's Summer and Tyson are also being planted largely. Dwarfs stand about as follows: Duchesse d'Angoulême, Howell, Beurré d'Anjou, Louise Bonne de Jersey, Belle Lucrative, Bartlett, Osband's Summer, Tyson, Brandywine, Beurré Giffard and Vicar of Winkfield.

A great difference, however, exists among planters as to the number or proportion of these to be planted, and this difference arises not so much from their own actual experience, as from that of others. The Bartlett succeeds everywhere, and is always considered safe to plant. The others are taken at more or less hazard. The Bartlett always sells well, and is known to thousands who know no other variety, and will sell readily when a better fruit would not sell at all. Color is an important quality; if the color be not attractive it will not sell. All the pears that are named above are of good color except the Belle Lucrative; in some seasons and localities it also colors up well. The Vicar of Winkfield, when well grown, colors finely in ripening, and commands high prices. When poorly grown it remains green, and is of no value whatever.

Late pears are growing in favor among market growers. Beurré d'Anjou is now the most popular; large, fair, excellent quality, and may easily be kept until January. The Lawrence stands next; it becomes a beautiful lemon yellow, and keeps rather longer than d'Anjou. Winter Nelis is not attractive looking, but sells well on account of its fine quality; keeps till January. All these ripen in a dry cellar as easily as an apple. Beurré Clairgeau promises to be very popular, and is already widely planted.

The Easter Beurré, the finest of all Winter melting or dessert pears, is difficult to grow to perfection, and is almost abandoned, except by amateurs. It needs a rich, warm soil and close pruning to maintain a fair growth of wood, and the fruit must be thinned. The tree, at best, does not seem capable of maturing in perfection a crop, although it is very prolific.

The Beurré Gris d'Hiver is a noble fruit. It requires high culture with pruning and thinning to bring it to perfection, as the tree has a tendency to overbear, like the E. Beurré.

The class of pears, known as baking pears, the flesh of which does not become soft and melting,

are not yet in demand, but I have no doubt they will be in a short time. As the uses of pears become better understood, there will be a demand for them.

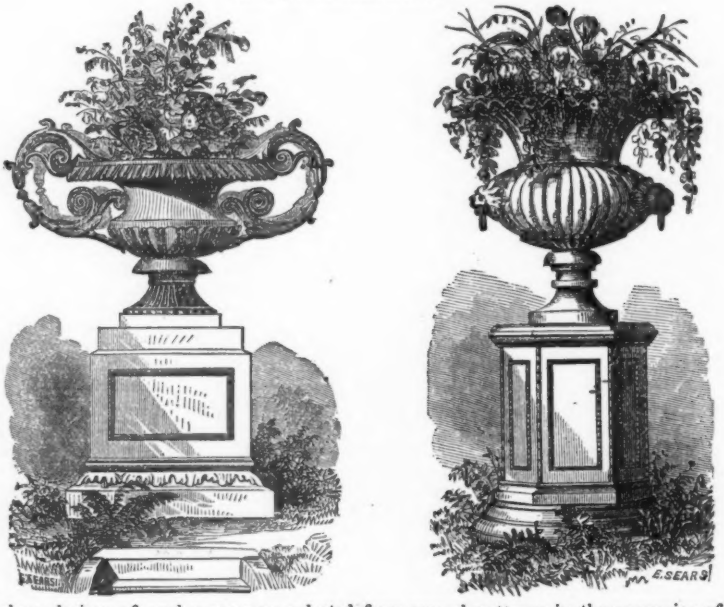
PEARS THAT ARE FAILING.

Our once famous White Doyenné, the finest of all pears at one time, and yet if in perfection, has generally fallen into a decline. It has been attacked by a sort of fungus on the skin, which destroys it. It is now abandoned in all the Eastern and Middle States. In some parts of the West, on new soils, it seems to flourish yet.

The Flemish Beauty is threatened with the same disease, and is now planted very sparingly.

The Beurré Diel, a noble fruit, has ceased to be reliable. Other varieties will doubtless go the same way. When a variety fails it should be grafted over.

Vases for Garden Decoration.



THE above designs of garden vases are selected from several patterns in the possession of Robert Wood & Co., Philadelphia, Pa., and our artist has thrown in a few graceful touches by way of embellishment, with flowers, shrubs and grass.

A vase well filled with striking flowers or plants of marked foliage, and placed on the lawn directly between the house and the street, imparts an air of elegance to a country residence, which gives a most admirable effect. The *coleus verscheffeltii* is a splendid shrub for use in such vases; so is the *Mountain of Snow Geranium*—and a skillful florist can find hosts of other plants equally as suitable and brilliant in their colorings. We have seen quite a number containing nothing but ornamental grasses, or even a simple specimen of Arbor Vitæ; the Fuschia is also very suitable.

Our Contributors.

THE Editor gracefully yields up his accustomed space, hitherto occupied by the Portfolio, to accommodate our increasing army of contributors. Our pages have not, in a long time, been so well filled with excellent articles of sterling practical value from our correspondents. ***Thrice welcome*** are they to our table, and we hope they will *never be weary in well doing*.

We want more, and we have always a cordial hand of fellowship to encourage our friends to *keep writing*. Our readers like *short, pithy articles*, records of *practical experience*, rather than theory, and as that is our own taste also, we have gradually changed the character of the magazine from a mass of dry reading to one which we are confident enough to believe has *not a waste line in it*, and every page teems with good ideas and pleasant intelligence. Our Drawer is full of good things for the future, and our April number will be particularly excellent in contributions and illustrations.

Get up a club and extend the benefits of THE HORTICULTURIST as far as possible. We are working for the interests of our readers, and we hope to merit a little effort on their part in recommending the Journal to their friends.

Hints for March.

Orchard and Nursery.

THE orcharding of the present day is a very different thing from the growing of tree fruit in the earlier days of the settlement of our country. From all sections comes up to us the cry, or inquiry, "What ails my apples?" "Are apples failing?" etc. The original mode of growing apple and fruit trees, in the Eastern States when first settled and tree planting commenced, was to set the trees scattering, or wide apart, with plenty of room between; and usually there was protection of forests not far distant, perhaps on all sides, and with little or no attention given the trees, there were abundant crops of good sound apples obtained. Varieties then were few, hardy and well adapted to the climate, soil, etc.; but with the lapse of time, increased cultivated taste, etc., old and tried varieties became inadequate to satisfy the desires, and new varieties must be introduced from abroad, bringing not only the trees, but also their diseases and insect enemies, which before were unknown among us. Varieties ill suited to our climate came with those better qualified to endure the climate, etc, till we have increased our varieties to vast numbers. Downing, in his last revised edition of "Fruits and Fruit Trees of America," describes 3,420 varieties of apples, 2,786 pears, and other fruits in proportion. With all this great variety there are but few which are especially adapted to any one locality, and that few must have regular and careful attention, in order to give us fruit, even in moderate quantities, and then we obtain only irregular returns, most frequently. Varieties and culture especially adapted to the Eastern and Middle States are unsuited for the more Western, Northwestern and Southern States, and sections, so that practical directions for any one particular section would necessarily need modifying materially for another, if they would not be entirely unsuitable; yet the practical experience of any section is valuable for another if judicious conclusions are drawn and applied in our experiments. Neither can these hints, if made special, be particularly adapted to all sections alike, as to time and application, yet it will be our aim to make practical suggestions in a general way from our own standpoint, embracing also suggestions drawn from reading reliable reports from other sections, and the best authorities.

The growing of Peaches in orchards has, of late, become an uncertain business, from diseases of the tree, and from insect enemies of tree and fruit, seasons, etc., yet no inconsiderable may be done in culture to overcome these obstacles. Growing stock and budding only from healthy parentage; judicious pruning and shortening in, is a means of prolonging the life of the tree and increasing fruitfulness; and early in the spring, as may be, is a proper time for pruning the peach, destroying insect eggs, borers, etc. Peach trees should be grown with low heads, as they shade the roots and are more within reach for pruning, and also for gathering the fruit; the heads should be pruned to a rounding shape, the new, or young wood, cut back one half; this reduces the numbers of fruit, but what is lost in numbers is made up, and more, in quality.

In pruning any standard fruit tree, in the orchard or garden, it is necessary to know its natural habit and form, and to interfere with that as little as possible, barely rubbing, or cutting out weak and superfluous buds and branches; in this way, by constant attention, we obviate the necessity of often cutting away any large branches, and weakening the health or vitality of the tree. In case where an old tree has been neglected and it becomes necessary to cut away considerably any branch, the cut should be made clean, smooth and close as possible to the main stem, and immediately have the wound covered with some impervious composition, and nothing is better than gum shellac dissolved, to the consistency of thin paint, in alcohol, which can be applied with a brush; kept closely corked in a wide mouthed bottle it is always ready for use; or, if from evaporation it becomes thick, a little alcohol added and stirred in restores it to the proper consistency.

Apple, pear or other fruit trees are often rejuvinated and cleared of many insects, in embryo, by washing their trunks and principal branches with a strong solution, made by dissolving potash in water, or a strong soap suds; and late winter or early spring presents the most favorable opportunity for performing it, as there is usually more leisure, and the eggs and young are more readily destroyed now, and also the wash is dissolved and often descends to the ground to be absorbed by the roots of the tree.

If the trees of the orchard have been neglected as to being manured, now is the time that a good dressing of manure may be given with good effect, for the tree must have something to feed on or it cannot produce good fruit in perfection; as well think of making a fat beef without good rich food, fed freely. A good compost of rich muck mixed daily with stable manure, and well fined, makes as good a fertilizer for an orchard as can be had; but in the absence of the manure good muck, mixed with lime, slacked in a saturated solution of salt in water, half a barrel, to a barrel, of dry slacked lime to a yard of muck, and well fined, or instead of the lime good wood ashes may be substituted, eight to ten bushels to the yard of muck and half a bushel of salt, or if you cannot get the muck mix lime, ashes and salt in the proportion of two, ten and one, and give a good dressing, broadcast, over the whole orchard as far as the tree roots extend.

As soon as the weather becomes mild and warm the moth of the canker worm will issue from the chrysalis state, from where they have spent the winter in the ground, and seek to ascend the trees where the male and female will couple, and the female will lay her eggs; stop their ascent, if possi-

ble, by trapping them while making their attempt. If every owner of a tree would carefully attend to his trees in season, this great nuisance could be greatly abated and eventually, effectively driven from our orchards and destroyed. As these pests not only lay their eggs in spring, but come out in fall or winter, preventives from their ascending the trees should be applied as early as October and continued till well into the next summer. Much might be done in working the ground to expose the chrysalids in fall and winter to the influence of the weather, and for the birds, etc. Traps, made by surrounding the trees with a band of paper, a foot wide, covered with tar mixed with oil or grease, to keep it soft, and kept fresh by renewal of the composition as necessary, would catch quantities of the female moths, by holding them fast, when they try to go over it in ascending the tree, as, from their nature, they creep along but slowly.

Too much attention cannot be given to ridding the trees and twigs of the little circles of eggs of the caterpillar or tent worm, before they hatch out, as they will begin to do, as soon as the weather becomes warm and the buds begin to burst and the leaves to push.

Pears, where successfully grown, are a profitable crop, much more so than almost any other tree fruit. The selection of varieties and trees to suit any given soil is a somewhat difficult matter, as often a given soil will only bring but one or two kinds to perfection; and where this is found to be the case those varieties should be grown to the exclusion of the others, so that we may gain a name and reputation for our fruit.

Planting should be forwarded as fast as possible; yet no planting should be done without first putting the ground in good condition by underdraining, where necessary, suitable enrichment, plowing and subsoiling. One tree properly planted and cared for by after attention is worth more than ten improperly planted and neglected afterwards.

Fruit Garden.

Look out in the garden and grounds and see how busy the birds are. What can they be doing I wonder? See! they seem to be picking and scratching over the leaves and ground. Oh! now I see what they are at; they seem to have found something and are eating it. They are seeking out the bugs, worms and insects, which if left alone would have given us trouble in our strawberries, other fruits and vegetables in the garden. They can find nothing now to live on except insects, etc., and they work lively to find them, and seem to be pretty successful. What quantities they must destroy? Remember that when that robin comes next May and June into your strawberry bed, currant bushes, cherry tree, etc., and takes some of your choice fruit, that you might not have had it if he or some of his kind had not kept off those insect pests that so often trouble. Do anything you can to save your choice fruit from his greedy appetite, when the time comes, but just remember his present services, there can be no disputing them if we but reflect a little. We know it is very annoying to have the choicest berries and fruit, often, destroyed by the birds, but such is their nature, and can we grudge them a little for the services they are doing us at the present season of the year?

A plenty of good fruit is what we all would like, and how shall we obtain it at reasonable rates? becomes the great question to solve. That we can plant trees, vines, etc., and sit down and fold our hand for fruit to grow, while we wait to eat, is far from a fact; "eternal vigilance" is the price at which we must obtain *good* fruit, if we would have and eat it; not only must we give it the best of culture, but we must secretly guard it from insect enemies, protect it from unseasonable frosts, storms, cold winds, etc.

Look to the fruit trees, quince and other shrubs and bushes, and destroy the borers, cover the ground around their collars with anthracite coal ashes, or use some other approved preventive for keeping the moth from depositing her eggs, favorably for reproduction; those already at work must be dug out, or followed up closely with a sharpened "stick."

Be not in too much haste to remove protection from choice fruit, plants and vines, and if any are unprotected and danger is to be feared from untimely frosts, etc., protect with a few evergreen boughs, or like.

Every place should have a fruit garden, or at least there should be a plentiful supply, according to the extent of the grounds, of Strawberries, Grapes, Raspberries, Blackberries, Gooseberries and Currants. Seldom do any of these fail to do well in all localities, when judicious selections of varieties is made. Good, deep, rich and well drained soil, with judicious culture, seldom fails to give good crops; and these may all be had naturally or with a little labor and expense, where one has a little ground.

In spring planting, Raspberries, the canes should be cut down nearly to the ground, when planted. Never look for any fruit from any tree, shrub, or woody vine, the season after transplanting, as what you lose in fruit is more than made up in increased strength and growth for future productiveness.

Grafting of plums and stoned fruits should be done before the buds begin to burst, as soon as the sap begins to flow.

Great heat is apt to injure trees when the ground around the roots becomes heated; it is well, then, in planting, to aim to so plant that the hot dry sun may not have full effect about the roots. Raspberries appear to do best where partially shaded, and may be planted frequently under trees in the garden, and while the partial shade seems to do good to the raspberries, the shade afforded by the raspberries helps the trees.

Lawn and Flower Garden.

With the opening of spring—whether it be in March, as in the Middle States, or April in the more Northern, or as in the Southern, in February—comes the annual clearing up; for however much may have been done preparatory in anticipating spring work, there is remaining a certain amount of finish to be given to all grounds after the "rest" of winter; and the preparing to plant spring flowers and green things.

With the English the lawn plays an important part in gardening, much more so than with us who need it so much more, to render our summer heats less oppressive by the green grass absorbing this same heat largely. One great obstacle to our greatest success with fine lawns is from our droughts, which often are severe, yet the gratification and pleasure attendant upon the possession of a pretty little "strip of green grass," or lawn, makes extraordinary efforts for its attainment desirable.

A great item in overcoming the effects of severe droughts is, in having the soil rich, deep and porous; for a deep soil is usually the reservoir of moisture, from which is drawn supplies to replace the waste from the surface from evaporation, thus keeping the grass and other plants from burning out. Why should the grass of a rich well kept lawn run out, or become weakened, any more than that of a fine old pasture sod which is kept closely grazed year after year, as is frequently the case? That they do become weakened from frequent close cutting, with the lawn mower, is the testimony of most experienced gardeners, and that in their weakened state weeds come in, is also true; these weeds are a source of great annoyance to the neat gardener, or the critic eye, and how to best get rid of them is often a question. Breaking up thoroughly and re-seeding is an expensive job, especially where there are trees, shrubs, etc., and is to be avoided whenever possible.

Some gardeners recommend, and our own observation, experience and opinion is, the best plan would be to top-dress exhausted lawns with burnt soil, or rich soil perfectly free of weed seed of any kind, and sow thereon grass seed, seeding thick—*Poa pratensis*, *Solium perenne*, and *Agrostis vulgaris*, are three varieties of grass which will accommodate themselves to different soils and circumstances, and will make, either, alone, an excellent sod. We would take one of these—which depending upon local, or other circumstances—and seed to that alone; they are dwarf grasses and will bear close cutting perhaps better than any other varieties, and the last named will bear greater abuse than any other grass we know of and recover.

Walks and roads are expensive to keep in repair, looking neat, and are to be avoided, except as absolutely necessary, and then turned and twisted as little as may be, consistent with beauty, without losing sight of necessary duties. Do not cut them from turf leaving trenches of sand, or canals for water or mud, but let them be a little oval, the centre higher than the bordering ground; of whatever material they are covered with they should be kept smooth and hard.

Paths and walks bordered with appropriate flowers and plants make the grounds attractive. We now have plants with beautiful and variegated foliage which make very pretty show, introduced into such borders; these mostly are of tropical origin, and can only be planted out after settled warm weather and the ground is warmed up. The Caladiums, Iresine, Coleus, and a number of other similar foliaged plants give quite as fine effect as flowering plants.

Planting of seeds in the open ground will only be done in the warmer sections, and then only those of the more hardy varieties, as planting before the soil gets suitably warmed will result in non-success with any, except perfectly hardy plant seeds.

Planting of trees and shrubs will require particular attention now; but do not hurry to do it the moment the frost is out of the ground, as time should be given for the soil to dry a little; and cold winds are not prone to treat new set trees, etc., with very great respect. Better wait a few days till they are over. Shorten in the shoots of trees to be newly set, as they will do the better for it. The roots need looking to, that any torn or bruised ones may be pruned, and made smooth, with a sharp knife.

Editorial Acknowledgments.

Transactions of the American Pomological Society, 1869.

We are indebted to Marshall P. Wilder for a copy of the above volume, which is quite valuable, and should be in the library of every horticulturist. We are also indebted to the same kind hand for a copy of his address before the New England Geneological Society.

Report of the Department of Agriculture, 1869.

This volume is edited with great care, and differs specially from former reports, by the entire absence of all contributions from outside writers. This is as it should be; the true idea being to exhibit the "*Department*" as it is and as it does, rather than to furnish the public with information properly belonging to the sphere of agricultural journals. We hope to see greater attention paid to the importance of introducing new plants into this country, and of all points none is more desirable than that of the *fibrous-leaved plants*.

Annuals, 1870.

Register of Rural Affairs, 1870, L. Tucker & Son, Albany, N. Y., is fully as practical and entertaining as ever. The space devoted to horticultural information is more limited than usual, but to the *farmer* there is an abundance of useful hints.

American Agricultural Annual, 1870, O. Judd & Co., New York, contains a large amount of statistical information, and several excellent articles on potatoes, by Dr. Hexamer, and steamed food for cattle, by S. M. & D. Wells.

The *Horticultural Annual*, 1870, by the same firm, has more and better contributions than the previous one. Josiah Hoopes discourses on the *Retinisporas*. W. G. Comstock, on selecting seeds. Dr. Warder, on new apples. P. Barry, on pears. F. R. Elliott, on peaches and cherries. A. S. Fuller, on small fruits. Peter Henderson, on new bedding plants; and James J. H. Gregory, on new vegetables. It is quite a faithful record of our horticultural progress for the past year.

The Practical Farmer.

PASCHALL MORRIS has certainly made a wonderful improvement in his enlargement of the *Practical Farmer*, and as an agricultural journal we esteem it thoroughly practical (true to name), useful and entertaining.

The American Farmer.

HAS changed hands, Mr. Frank Lewis succeeding the old firm of Worthington and Lewis. The quarto form is assumed. and hence it has become a newspaper rather than a magazine. The subscription price has been reduced to $1.50, and numerous other improvements added. It is now the oldest agricultural publication in the United States.

The Grape Culturist.

GEORGE HUSMANN has determined to enter upon his second volume, and "*do or die.*" We admire his enterprise, and wish a "*heap*" of subscribers for his excellent journal.

The Gulf States.

A MOST remarkable leap from Tangipahoa, La., to New Orleans, and a change of name from its old cognomen of *The Southern Ruralist*. We like the new appearance much better than the old, and the contents are likewise much improved.

Farming as a Profession;

Or, How Charles Loring Made it Pay. By T. A. BLAND, Editor *North Western Farmer*. A very pleasant sketch of how a young man won a farm and home, containing many incidents and practical suggestions to young farmers. It should be read by every farmer boy in the land.

Miscellaneous Publications Received.

Alabama: Her Resources.—A pamphlet prepared by the Commissioner of Industrial Resources, descriptive of the land and agricultural advantages. Published at Montgomery, by John G. Slotes and Co.

Prize Essay on Cooked Food for Domestic Animals.—A very practical little pamphlet, well written and fully explanatory of one of the most useful and economical of all farm practices.

Proceedings of Third Annual Convention of American Institute of Architects— Contains an admirable address by E. L. Godkin, and a very faithful report of the discussions of the Institute.

Norway Oats.

WE are indebted to Mr. Ramsdell for some of his Norway Oats. Our experience with them, in 1869, was very satisfactory, and we believe them to be the *most productive variety* ever grown in this country. A large amount of impure seed, disseminated last year, created a prejudice against it, but the pure seed has proved to be almost extraordinary in its productive results. The weight per bushel equals the legal standard of 32 lbs., while its yield is fully three times that of any common variety.

Catalogues of Nurserymen.

A LARGE number received too late, will be noticed in April number.